Engineering Village

(check both database boxes)

Inspec
and
Compendex
Inspec and Compendex: Indexes to conference and journal papers (check both boxes – Inspec and Compendex)

- **Inspec** -- physics, electrical engineering, computer engineering, communications, optics, photonics, electronics, computers and control, simulation and modeling, biomedical technology, radar, electrical power, robotics, telecommunications, radio, mechanical and production engineering, and information technology for business

- **Compendex** – All areas of engineering

- 20% **overlap** between Inspec and Compendex

- **Combine Inspec and Compendex** (check both boxes)

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

Quickly browse for only a **few** papers on a topic

- Limit by (drop down menus, below search box)
  - “**Journal article**” (**Document Type**)
    - Find It @ GT works properly for most (but not all) journal papers, but seldom works for conference papers
  - “**English**” (**Language**)
  - **Date** (**recent** range of years, or sort by Date Newest)

- To add **synonyms** to your search strategy, check:
  - Title, Abstract, Subject heading fields
  - Thesauri (online)
  - Bibliographies/references and footnotes in similar papers

- **Sample quick review keywords**

If Autostemming is **ON**, controllers searches control, controlling, controlled, controllers…
Inspec 1896+ and Compendex 1884+

- **Autostemming - Turn ON.** Autostems (automatic plurals...) all key words except for Author names and words in quotations and/or braces
  - Be sure that **Autostemming is turned ON after every search**, such as after "Search history" is used ("Results")
  - Always check that Autostemming is turned ON when using “Expert Search”
  - Using truncation or wildcards will turn off the autostemming feature
Inspec 1896+ and Compendex 1884+

- **Truncation** is asterisk (*). Model*.
- Note: use left truncation with care
  (*sorption returns absorption)
- **Exact phrase** within **quotes** (" ")
- **Select** both boxes, Inspec 1896+ and Compendex 1884+ (20% overlap)
- "**Search**" drop down menu (top row)
  - “Quick Search” or
  - “Expert Search”
Inspec 1896+ and Compendex 1884+

• **Proximity**
  - **Near/ #** - keywords are *within* zero to # terms of each other, in *any order*. Example: laser NEAR/4 diode
  - **Onear/ #** - *within* zero to # terms, in the *order* entered
  - **NEAR** and **ONEAR** can **not** be used with truncation, wildcards, parenthesis, braces or quotation marks
  - **Exact phrase**: use *quotes* “signal processing”
Inspec 1896+ and Compendex 1884+

• **Proximity**
  - **Autostemming** can be used with **proximity operators** (NEAR/# ONEAR/#) since all of the terms are automatically stemmed. You cannot use proximity operators with stemming unless all the terms are stemmed.

• **Search tips** (Compendex and Inspec):
  - [http://libguides.gatech.edu/Inspec](http://libguides.gatech.edu/Inspec)
  - [http://www.prism.gatech.edu/~bw21/databases-guides.htm](http://www.prism.gatech.edu/~bw21/databases-guides.htm)
  - `?` (top, right of screen)
• **Databases** – check both boxes Compendex and Inspec

• **Sort by**
  - Date (Newest)
  - Relevance

• **Date**
  - Published _ year to _ year

• **Document type**
  - Journal article
  - Conference article

• **Browse indexes** (brings up pop-up screen)
  - Author (note author name variations)

• **Only Inspec “Treatment” types are current**
Inspec 1896+ and Compendex 1884+

• **Results**
  - Default is “Citation” (brief info.)
  - Use “**Detailed**” or “**Abstract**” (for email, print, download – after “Select range” -- “Choose format”)

• **Remove Duplicates**
  - Choose “**Database Preference**” – Inspec or Compendex
  - Duplicate records will be removed from the first **1000** records in the result set

• **Display: 100** results per page
Personal Account (free)

- Alerts and Saved Searches
  - Two databases, Inspec & Compendex
  - 100 results per page
  - Sort by Date (Newest)
  - Download format (EndNote, RTF Word, etc.)
  - Download output (abstract or detailed)
  - Download location (My PC, your folders, etc.)

- With your personal account, you can create up to ten folders in which to save selected records. Each folder can contain up to 100 records

- “Your session has expired due to inactivity of over 30 minutes. Create an account or login to extend the session time to 8 hours and retain your search history and selected records for 7 days.”
Author Names

• Author formats differ in each database
  • INSPEC - - Only author initials
  • Compendex - - Author names are as written in paper (initials or first names)
• Use “Browse indexes” “Author”
  – Browse using both spaces and commas after surnames
  – Browse with and without middle initial
  – Browse with full first name
“Search”
➢ Quick
➢ Expert
➢ Thesaurus
• “Results” (top row)
• “View all results” - lower right corner
• “Search history” (recombine previous search statement lines)
• “Combine searches”
- **Results - View all Results**
- **Search history**
- **Combine searches**
  
  (#1 AND #2 AND #3) AND (radar)

**Turn Autostemming ON**

**Actions:** Create **Alert**; **Save** search; **Edit** this search; **Delete** search from search history
Turn **Autostemming ON**
Default for “Expert Search” and “Search history” is off
Be sure “Autostemming” and turn **ON** before **every search**
Search History (top row, “Results” – “View all results”)

- “Combine previous searches” in the **same databases**
- Manipulate **previous search statement** numbers with **Boolean operators** and **keywords**
- Can add keywords. **“Search History” example:**
  
  #1 and #2 and (laser* wn ti)

- Open a **Word document** and **keep track** of search statement **line numbers**
- **Alerts** and **Save Search** – **one line only**
- **Combined** search set is only one search statement line - one long string of keywords used in previous statements
- Example. “Combine” -- when combining search statements, the earlier search statement numbers are lost.

#4 displays as a **string of keywords, not as** (#1 and #2 and #3)
Combine searches can also include **keywords**. Example: 

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

Combine searches listed in the Search History as follows:

1. (#1 AND #2)
2. (#1 AND #2) OR (#3 AND #4)
3. (#1 OR #3) NOT #2

Combine searches executed in the same database only.
**Combined** (#4) does **not** say **#1 and #2 and #3**. It only gives keyword result (after Combined)

- Open a **Word file** and copy and paste statement lines
- **Email Alert** and **Save Search** both save only **one line**

Session expires after 30 minutes of inactivity. Register for extra time.
• “Remove Duplicates” (from first 1000 records)
• Choose “No field preference” (there is no full text)

Do NOT choose “Has Full Text” – these databases have no full text (under “No field preference”)

---

Remove duplicates

Duplicate records will be removed from the first 1000 records in the result set. Select the field and the database preference below.

No field preference

Inspec

Database Preference

Compendex

Inspec

---

Refine

Remove duplicates

1. Space object

---

Alert  Save  RSS

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20
• Create **alert**
• **Save** Search
• **Display:** 100

**Email** selections
• **Print** selections
• **Download**

**Sort on:** Date (Newest)
- Session may expire after 30 minutes of inactivity
- Select all boxes on one screen or check specific boxes
- **Output**: Choose “**Detailed**” or Abstract (not “Citation”). DOI # is only in “Detailed” record format
- E-mail or Print or Download records to avoid being **timed out**
- **Download** Format – EndNote, CSV, Excel, RTF, etc.

![Download record(s) dialog box](image)
Engineering Village Registration

- Alerts will send new records on your chosen topics to your email
- Saved records to folders
- Longer time-out – 8 hours
- Save your searches
- Save and customize download formats
- Customize your searching and results

Retain Session information for Registered Users

Highlights:
- Logged in users retain session information from previous session
- Up to 50 searches and 500 selected records are stored
- Session info saved for 7 days
- If user is timed-out, session searches/selected records are saved
Modern spectral analysis techniques for blood flow velocity and spectral measurement with 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: IEBEA

Document type: Journal article (JA)

Country of publication: USA

Abstract: Four spectral analysis techniques were applied to pulsed Doppler ultrasonic quadrature to compare the relative merits of each technique for estimation of flow velocity and Doppler frequency. 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 analyzed. Optimal parameter values (e.g. model orders) were determined for each method, and the signal-to-noise ratio, signal bandwidth, and high-frequency components were investigated. The modern spectral analysis techniques were shown to be superior to Fourier techniques in most circumstances, providing more accurate estimates of flow velocity and Doppler frequency.
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Number of references: 19

INSPEC controlled terms: biomedical ultrasonics | Doppler effect | haemodynamics | spectral analysis

Uncontrolled terms: optimal parameter values | spectral analysis techniques | blood flow velocity | spectral measurements | pulsed Doppler ultrasound | quadrature signals | maximum likelihood method | Burg autoregressive algorithm | simulated signals | in vitro flow system | model orders | signal-to-noise ratio | signal bandwidth | Fourier techniques | steady laminar flow | arterial disease

INSPEC classification codes: A8760B Sonic and ultrasonic radiation (medical uses) | A8770E Patient diagnostic methods and instrumentation | A8745H Haemodynamics, pneumodynamics

Treatment: Theoretical (THR); Experimental (EXP)

Discipline: Physics (A)

Database: INSPEC

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Full-text and Local Holdings Links

Find It GT

- **Controlled** terms CV (INSPEC thesaurus terms)
- **Uncontrolled** terms FL
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 covariance method. A number of spectral estimation techniques have recently been developed and have been compared to the more standard fast Fourier transform (FFT) method for Doppler ultrasonic signal processing. The most common of these methods are autoregressive (AR), moving average (MA), and...
Title: Numerical study of an asymmetrical stenosis
Authors: Jin, Suo; Giddens, Don P.
Source title: American Society of Mechanical Engineers, Bioengineering Division (Publication) BED
Monograph title: Advances in Bioengineering
Publication year: 1998
Pages: p 63-64
Language: English
Document type: Conference article (CA)
Conference name: Proceedings of the 1998 ASME International Mechanical Engineering Congress and Exposition
Conference date: Nov 15-20 1998
Conference location: Anaheim, CA, USA
Conference code: 49454
Sponsor: ASME
Publisher: ASME, Fairfield, NJ, USA

**Compendex 1884+**

**Author name as in paper**

**Conference article**

Use several fields
- Serial/Source title:
- Conference name:
- Monograph title:
- Conference date:
- Conference location:
“Find It GT” works for most (but not all) journals, but often does not work for conference proceedings, rarely works for technical reports, and does not work for patents.
“Find It @ GT” Link directs to interlibrary loan, even though the conference listed is in the GT Library Catalog


Available at Main Library - 5th Floor East (R856 .A2 A44 1998 )


Subjects: Bioengineering -- Congresses; Biomedical engineering -- Congresses; Biomechanics -- Congresses; Human mechanics -- Congresses; Prosthesis -- Congresses; Implants. Artificial -- Congresses

Related Titles: Series: BED ; v. 39.

Publisher: New York, N.Y. : American Society of Mechanical Engineers

Conference record is in GT Library Catalog
Records resulting from combined Compendex and Inspec database searches include “Cited by in Scopus”.

Click on “41” to retrieve the 41 Scopus indexed articles that cite Burrow’s Inspec/Compendex indexed paper (Multi-beam…).
Find It @ GT and ILLiad

• “Find It @ GT” often does not work for conference papers, technical reports, patents, etc. Check the Catalog and ejournals list. Ask for help!
• “Find It @ GT” usually (but not always) works properly for journal articles
• You can request individual papers from journals and conferences and brief book chapters by filling out an ILLiad request form for each separate article/paper (https://illiad.library.gatech.edu/). PDFs will be sent to your ILLiad account. This applies to interlibrary loan articles (requested from other libraries) and to print journals/conferences owned by the GT Library
• Provide complete bibliographic information in your ILLiad request, using the “Additional Notes” field, if needed
• Interlibrary loan requests often take 1-3 weeks turn around time. Turn around time is much faster for GT owned materials
Inspek 1896+ and Compendex 1884+

Thesaurus

• “Search” (top row). Drop down menu
  Thesaurus
  Search each database separately

• Click on “Exact Term”

• Check Scope Notes

• Controlled terms (thesaurus terms)
  – Controlled terms can be different for each database and can have restricted date coverage

• Uncontrolled terms (identifiers – these are not thesaurus terms)
Scope Note:
MEMS
Introduced: October 2006

- “Search” – Thesaurus
- Search each database separately
- For: Broader terms, Related terms, Narrower terms, Scope Note
• Search for author **name variations**:
  - “**Browse indexes**” (top row, right)
  - Select “**Author**”

• Only check Compendex and Inspec

• Author **surnames** can be followed by a **space or** by a **comma**, before the author's first name. Try a **space** after the last name, **and** then try a **comma** after the last name.

• Search 1 and 2 **initials and** also **full first name**.

• Example: **Clough G** … **Clough, G** … **Clough W** … **Clough, W** (for G. Wayne Clough)
Author name search. Browse Indexes

**Inspec** does not use authors' first names, but only their initials.

Use of the **Author Browse Index** is strongly recommended for both Inspec and Compendex in order to make selections from all the possible variations on an author's name.

**Compendex** Author names can be truncated by using an asterisk (*) as the truncation symbol:

Smith, A* will retrieve

- Smith, A.
- Smith A.A.
- Smith A.B.
- Smith, A. Brandon
- Smith, Aaron
- Smith Aaron C. etc.
Author Names

- **Compendex “Author Affiliation” Field**
  - Prior to **2001**, the official Compendex policy was to provide the institutional affiliation of the **first** author or editor.
  - Since 2001, the affiliation of the Compendex **corresponding** author has been given instead (Compendex)

- Beginning **March 16, 2009**, for **Compendex** and **PaperChem**, the following fields will be added or modified:
  - **Multiple Author Affiliations** - Multiple authors will now be listed in the author affiliations field. Now, if an article has more than one author, most of the names and affiliated institutions will appear
  - A corresponding author and **email field** will be added to the detailed record display. For those records with multiple author affiliations, the contact information of the lead author will appear
IEEE Explore

• Full image content available in IEEE Xplore: IEEE and IEE/ IET journals and conference proceedings from 1988, with select content before 1988
• Use Inspec/Compendex (1896+/1884+) for searching! IEEE Xplore is a subset of the Inspec database. IEEE Xplore includes Inspec abstracts and IEEE and Inspec index terms
• Use IEEE Xplore as document delivery for IEEE, IEE and IET journal and conference papers
• “Find It @ GT” will work for most (but not all) IEEE, IET and IEE journal articles. Also check the Catalog and ejournals list
Search by Fields

- **Author**  AU
- **Title**  TI
- **Controlled term**  CV
- **Uncontrolled term**  FL
- **First Author affiliation**  AF
- **Subject/Title/Abstract**  KY

- **Search by Fields (Author, Title ...)**
- **Controlled terms (thesaurus terms)**
  - **Controlled terms** can be **different** for each database and can have **restricted date** coverage
- **Uncontrolled terms (identifiers)**
- **Keep Autostemming “ON”**

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### Search Codes

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Inspec 1896+ and Compendex 1884+

- Inspec and Compendex have **different**
  - “Controlled Terms” (thesaurus subject headings)
  - “Document Types” and “Treatment Types”
- **Compendex “Document Types”** (journal paper, conference paper, etc.) are **only** for **1985** to present
- Unique “Types” in each database
- **Compendex “Treatment Types”** (General Review, Applications, etc.) are **only** from **1985 to 2008**. Do **not** use Compendex Treatment Types!
- **Inspec “Treatment Types”** are **current** (General Review, Application, Practical, New Development, etc.). Do **not** rely on these treatment types (not comprehensive)
Standards

- Selected standards records are being added to Engineering Village (such as IEEE and ASTM). "Standard" or Std is usually mentioned in the database record, such as in the document type field or in a subject heading field.
- The Georgia Tech Library subscribes to IEEE, ASTM, ASCE, and selected other standards.
- Most other standards must be purchased through the standards society or through a third party standards vendor.
- See the Standards Research Guide at http://libguides.gatech.edu/standards
Careers (“provided by Mendeley Careers”)

Search 203,639 science and technology jobs on Mendeley Careers

Get job alerts
Let us do the hard work. Sign up for our free service and get great jobs emailed to you.

Upload your CV
Upload your CV so our recruiters can match details to the best available positions.

Discipline  Job Type  Location
Agriculture & Biology 5785  Chemistry 13710  Medicine 23947
Arts & Humanities 862  Dentistry 918  Pharmaceutical 15095
Biochemistry, Biophysics & Biomedics 4034  Engineering 43298  Physical & Earth Sciences 2045
Business, Finance & Law 76699  Mathematics & Computing 46088  Social Sciences 5302

Customer Service
Contact and support
Subscribe to newsletter
Blog
Twitter

Careers
All engineering jobs
By job category
provided by Mendeley Careers
- IET Inspec LibGuide
  [http://iet.libguides.com](http://iet.libguides.com)
- Engineering Village – (?) top row, right
  - Help
  - Quick search tutorial
  - Video help
- Engineering Village [Quick Search](http://help.engineeringvillage.com/)
- Engineering Village [Training videos](http://help.engineeringvillage.com/)
Search Tips

Learn & Support  Training  Tutorials
Training videos and webinars

Quick search tips
Use truncation (*) to search for words that begin with the same letters.

comput* returns computer, computers, computerize, computerization

Truncation can also be used to replace any number of characters internally.

sulf*ate returns sulphate or sulfate

Use wildcard (?) to replace a single character.

wom*n returns woman or women

Autostemming stems all search terms unless they are enclosed in quotation marks and/or braces or are contained in the author field, unless the “Autostemming off” feature has been selected.

management returns manage, managed, manager, managers, managing, management

To search for an exact phrase or phrases containing stop words (and, or, not, near), enclose terms in braces or quotation marks.

“near field scanning”

“not to exceed”

“Northeast University”

{Journal of Microwave Power and Electromagnetic Energy}

{rocks or minerals}

{chemical physics}

Use NEAR or ONEAR to search for terms in proximity. The NEAR command is used for searching terms that are near to each other in any order. The ONEAR command is used for searching terms that are near to each other in the order specified in the search query.

NEAR and ONEAR cannot be used with truncation, wildcards, parenthesis, braces, or quotation marks. NEAR and ONEAR can be used with autostemming.
While accessing e-resources off-campus, you may notice an **OpenAthens login** screen. The OpenAthens screen will ask you to identify your home. Use the "**Login via your institution: Other Institution Login**" (box, right column of screen) then "**Find your organization**" or "Find your institution" to search for **Georgia or Georgia Tech or Georgia Institute** (Georgia Institute of Technology or Georgia Tech); the OpenAthens list may not be alphabetical. See **example**. From there, use the **Georgia Tech login** service and you will be given access to the resource.

If you see a different screen, you may need to look for sign in or login links, usually at the top; you might be asked to select your Federation, which is OpenAthens Federation or Open Athens Federation.

Learn about the Library’s OpenAthens Authentication service at **OpenAthens Frequently Asked Questions** or **OpenAthens FAQ**. See **examples**.

Begin at the Library **home** page, choosing Databases, Journals (e-Journals), or the Library Catalog. A list of all databases is at [http://libguides.gatech.edu/az.php](http://libguides.gatech.edu/az.php) (top row "Find, Borrow, Request" - "Find Materials" "**Databases**" then search by database name in the search box, or search the database name alphabetically or by subject). For one-on-one quick and in-depth database search assistance: contact Bette Finn at bette.finn@library.gatech.edu. If you have database access questions or problems, please contact ept@library.gatech.edu.
Assistance searching the Library’s Databases

- For **ECE and GTRI and PMASE** one-on-one **in-depth and quick** database search assistance and group instruction, please **contact Bette Finn** ([bette.finn@library.gatech.edu](mailto:bette.finn@library.gatech.edu))

- For other schools, contact your **Subject Librarian** for assistance searching any of the Library’s **databases**. Every GT school has a Subject Librarian

- For circulation questions (check-out books, **Recalls**, etc.) – contact an associate in the Public Services area (Crosland Tower, Grove Level Ground Floor, Library Store) or phone 404-894-4530

- **All Research guides**
- **All Databases**