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For all Electronic Resources provided by the Library, see <http://www.siu.edu/lovejoylibrary/>

FINDING BOOKS

I-Share

- Catalog for Lovejoy Library and some 70 other Illinois libraries.
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WorldCat (see <http://www.siu.edu/lovejoylibrary/>)

- Online Catalog for more than 44,000 libraries worldwide.
- Can submit interlibrary loan requests using **Illiad**, the electronic interlibrary-loan request system.

Principal **Subject Headings** or “about” terms to use in I-Share or WorldCat:

Antennas (Electronics)
Computer networks

Computer engineering
Control theory

Digital communications	Digital electronics
Digital integrated circuits	Electric circuits
Electric circuits, Linear	Electric circuits, Nonlinear
Electric engineering	Electric machinery
Electric power	Electric power distribution
Electric power transmission	Electromagnetics
Electronic apparatus and appliances	Electronic circuits
Electronic digital computers—Circuits	Electronic packaging
Electronics	Electronics—Materials
Feedback control systems	Feedback (Electronics)
Integrated circuits	Integrated circuits—Very large scale integration
Logic circuits—Design and construction	Microcomputers
Microelectronics	Microprocessors
Microwave circuits	Microwave communication systems
Microwave devices	Microwaves
Mobile communication systems	Nanoelectronics
Optical communications	Optoelectronics
Radar	Power electronics
Semiconductors	Signal detection
Signal processing	Signal processing—Digital techniques
Telecommunication	Transistors
Wireless communication systems	Wireless internet

[In the Online Catalog, other related subject headings will often be suggested when a subject heading search is performed]

MAJOR DICTIONARIES, ENCYCLOPEDIAS AND HANDBOOKS:

American Electricians' Handbook. 14th ed. (McGraw-Hill, 2002) (Ref. TK 151.C8 2002)

Battery Technology Handbook. 2nd ed. (Marcel Dekker, 2003) (Available in [ENGnetBASE](#))

The Circuits and Filters Handbook. 2nd ed. (CRC Press, 2003) (Available in [ENGnetBASE](#))

The Communications Handbook. 2nd ed. (CRC Press, 2002) (Available in [ENGnetBASE](#))

The Computer Science and Engineering Handbook. (CRC Press, in cooperation with ACM, 1997) (Ref. QA 76.C57315 1997)

Comprehensive Dictionary of Electrical Engineering. 2nd ed. (CRC Press, 2005) (Available in [ENGnetBASE](#))

The Computer Engineering Handbook (CRC Press, 2002) (Available in [ENGnetBASE](#))

The Control Handbook. (CRC Press, 1996) (Ref. TJ 213.C6593 1996, and also available in [ENGnetBASE](#))

The CRC Handbook of Modern Telecommunications (CRC Press, 2001) (Available in [ENGnetBASE](#))

Data & Telecommunications Dictionary (CRC Press, 1999) (Ref. TK 5102.P48 1999)

The Digital Signal Processing Handbook (CRC Press/IEEE, 1998) (Ref. TK 5102.9.D534 1998, and also available in [ENGnetBASE](#))

Electric Power Distribution Handbook (CRC Press, 2004) (Available in [ENGnetBASE](#))

The Electric Power Engineering Handbook (CRC Press, 2001) (Available in [ENGnetBASE](#))

Electrical Engineering Dictionary (CRC Press, 2000) (Available in [ENGnetBASE](#))

The Electrical Engineering Handbook. 2nd ed. (CRC Press, 2000) (Available online in [ENGnetBASE](#))

The Electronic Packaging Handbook (CRC Press, 2000) (Available in [ENGnetBASE](#))

Electronics Engineers' Handbook. 4th ed. (McGraw Hill, 1997) (Ref. TK 7825.E34 1997)

The Electronics Handbook. 2nd ed. (Taylor & Francis, 2005) (Available in [ENGnetBASE](#))

The Encyclopedia of Electronic Circuits. (Tab Books, 1985-) (Ref. TK 7867.G66 1985)

Encyclopedia of Software Engineering. 2 vols. (Wiley, c2002) (Ref. QA 76.758.E53 2002)

[ENGnetBASE](#) [image full-text of over 700 Engineering handbooks published by CRC Press, Chapman & Hall, and Marcel Dekker, —available online via Library's website at: http://www.siu.edu/lovejoylibrary/research_tools/engineering_reference.shtml]

Handbook of Electric Motors. 2nd ed., rev. & exp. (Marcel Dekker, 2004) (Ref. TK2514.H26 2004)

The Handbook of Formulas and Tables for Signal Processing (CRC Press, 1999) (Available in [ENGnetBASE](#))

Handbook of Nanoscience, Engineering, and Technology (CRC Press, 2003) (Available in [ENGnetBASE](#))

Handbook of Optical Engineering (Marcel Dekker, 2001) (Available in [ENGnetBASE](#))

Handbook of Optoelectronics. 2 vols. (CRC Press, 2006) (Available in [ENGnetBASE](#))

The Handbook of Software for Engineers and Scientists. (CRC Press, 1996)
(Ref. QA 76.754.H35 1996)

McGraw-Hill Encyclopedia of Science & Technology. 10th ed. (McGraw-Hill, 2007) (Ref. Q 121.M3 2007). This source can also be accessed in electronic form as **Access Science**.

The Mechatronics Handbook (CRC Press, 2002) (Available in [ENGnetBASE](#))

The Mobile Communications Handbook. 2nd ed. (CRC Press/IEEE Press, 1999) (Ref. TK 6570.M6 M5934 1999, and also available in [ENGnetBASE](#))

National Electrical Code. (National Fire Protection Association) (Ref. TK 260.N48 2005)

The Power Electronics Handbook (CRC Press, 2002) (Available in [ENGnetBASE](#))

The RF and Microwave Handbook (CRC Press, 2001) (Available in [ENGnetBASE](#))

The Telecommunications Handbook (CRC Press, 2000) (Available in [ENGnetBASE](#))

The Transforms and Applications Handbook. 2nd ed. (CRC Press/IEEE Press, 2002)
(Available in [ENGnetBASE](#))

The VLSI Handbook (CRC Press/IEEE, 2000) (Ref. TK 7874.75.V573 2000, and also available in [ENGnetBASE](#))

Wiley Electrical and Electronics Engineering Dictionary (Wiley/IEEE, 2004)
(Ref. TK 9.K39 2004)

Wiley Encyclopedia of Electrical and Electronics Engineering. 24 vols. (Wiley, 1999)
(Ref. TK 9.W55 1999)

EXAMINATION/STUDY GUIDES:

Electrical Discipline-Specific Review for the FE/EIT Exam (Professional Publications, 1997)
(TA 159.A2 1997)

Electrical Engineering Reference Manual for the Electrical and Computer PE Exam. 6th ed.
(Professional Publications, 2002) (Ref. TK 169.Y37 2002)

LITERATURE GUIDES AND BIBLIOGRAPHIES:

Hurt, C. D. **Information Sources in Science and Technology.** 3rd ed. Englewood, CO: Libraries Unlimited, 1998. (Ref. Q158.5.H85 1998)

Lord, Charles R. **Guide to Information Sources in Engineering.** Englewood, CO: Libraries Unlimited, 2000. (Ref. T10.7.L67 2000)

FINDING JOURNAL ARTICLES – Online Indexing and Abstracting Services

Applied Science & Technology Index. Bronx, NY: H. W. Wilson, 1958- . Print index in Library Reference Collection under Ref. T 1.I6 1958-2003. Useful for searching more practical or applied computing applications in older periodical literature.

Compendex. Hoboken, NJ: Engineering Information, 1990- . Available online through **Engineering Village** service; go to the link: http://www.siue.edu/lovejoylibrary/research_tools/engineering.shtml, and then click on “*Compendex.*” This is the online counterpart to *Engineering Index*, available from 1959 up through 1989 in the Library’s Book Collection under (TA 1.E6723 and TA 1.E6722).

IEEE Xplore – Available online through Library at http://www.siue.edu/lovejoylibrary/research_tools/engineering.shtml. IEEE’s portal to a vast array of technical literature in electrical engineering and computer science. The Library now subscribes to the entire **IEL**, which encompasses the full-text of the Journals & Transactions, conference papers, and standards.

Index to IEEE Publications. (Ref. TK 1.I54—index to older citations; current coverage in **IEEE Xplore**)

ABI/INFORM Complete (ProQuest) – Abstracts articles in all subject areas of business and economics; covers both trade periodicals and academic journals. Would be an excellent source for articles on business/management aspects and applications of engineering. Very good indexing vocabulary. Available at: http://www.siue.edu/lovejoylibrary/research_tools/business.shtml

Search Tips:

Most library databases permit you to:

- SEARCH by: author title subject keyword
- LIMIT by: publication year language document type
name of source journal peer-reviewed journals only
- COMBINE terms: **AND OR NOT** (Boolean connectors)
- TRUNCATE terms with: asterisk * question mark ?

For example: structur* retrieves structural, structure, structures
wom?n retrieves woman or women

PRINCIPAL JOURNALS (Held by or Accessible Online at SIUE):

[Access varies—some titles in print/microform, some electronic, some both]

ACM Transactions on Design Automation of Electronic Systems
Active & Passive Electronic Components
Automatica
Computer Communications
Computer Networks
Computer Networks and ISDN Systems
Computer Vision and Image Understanding
Computers & Electrical Engineering
Computing & Control Engineering
Digital Signal Processing
EDN
Electric Power Components and Systems
Electric Power Systems Research
Electromagnetics
Electronic Design
Electric Power Components and Systems
Electric Power Systems Research
Electronics Systems & Software
Electronics Letters
Ferroelectrics
Graphical Models and Image Processing

IET Journals [22 journals from the Institution of Engineering and Technology (formerly, the Institution of Electrical Engineers (IEE)—print and online]

IEEE All-Society Periodicals Package (ASPP) [some 128 magazines, journals (listed below), letters, and transactions from the Institute of Electrical and Electronics Engineers (IEEE)—accessible online from 1998 via [IEEE Xplore](#); older years in print]

IEEE Journal of Quantum Electronics
IEEE Journal of Selected Topics in Quantum Electronics
IEEE Journal of Solid-State Circuits
IEEE Journal on Selected Areas in Communications
IEEE Sensors Journal
IEEE Spectrum
International Journal of Circuit Theory and Applications
International Journal of Electrical Power & Energy Systems
International Journal of Electronics
International Journal of High Speed Electronics and Systems
International Journal of Reliability, Quality and Safety Engineering
International Journal of RF and Microwave Computer-Aided Engineering
Journal of Circuits, Systems, and Computers
Journal of Electronic Imaging
Journal of Electronic Packaging / ASME
Journal of Lightwave Technology : a Joint IEEE/OSA Publication
Journal of Microelectromechanical Systems / IEEE/ASME
Journal of Modern Optics

Journal of Network and Computer Applications
Microelectronics Journal
Microprocessors and Microsystems
Networks
Optics & Laser Technology
Pattern Recognition
Power Engineer
Power Engineering
Proceedings of the IEEE
Semiconductor International
Semiconductors
Signal Processing
Signal Processing. Image Communication
Solid State Communications
Solid-State Electronics
Solid State Technology

Locating a Particular Journal/Periodical:

- Some titles are in print/microform, some electronic, some both. How do you know which?
- The online catalog, **I-Share**, will tell you what periodicals/journals the Library holds in print or microform. In the online journal databases, the full-text may be immediately accessible, or a link will be provided to take you to the full text in another system. But if you are not in a particular journal database, to determine if a journal is electronically available in full text/image, follow these steps:
- from the Library's homepage (<http://www.siu.edu/lovejoylibrary/>), select “**eJournals by Title (SFX)**” under the “**Find Articles**” section.
- within the “Electronic Journals” search screen, enter the title of the desired journal in the space provided.
- use the hot link(s) provided to access the appropriate database holding the journal’s full text.

STANDARDS:

Annual Book of ASTM Standards. Conshohocken, PA: ASTM, 1970- . (Ref. TA401.A653)

ANSI (American National Standards Institute) — <http://www.ansi.org/>

IEEE Standards – 1,600 current and active IEEE standards available online in **IEEE Xplore**.

Index and Directory of Industry Standards. Englewood, CO: Global Engineering Documents, 1989- . (Ref. T59.2.U6I5 1998)

Ricci, Patricia. **Standards : A Resource and Guide for Identification, Selection, and Acquisition.** 1992. 2nd ed. (Ref. T59.R48 1992)

TECHNICAL REPORTS:

Hewlett-Packard Laboratories Technical Reports –

<http://www.hpl.hp.com/techreports/index.html>. HP technical reports produced since 1990.

IBM Technical Reports – <http://domino.research.ibm.com/library/cyberdig.nsf/index.html>.

National Technical Information Service (NTIS) – <http://www.ntis.gov/search/>. Central resource for locating government-funded scientific, technical, engineering, and business related information. NTIS Library can be searched for documents published since 1990.

SELECT INTERNET RESOURCES:

Chip Directory – <http://www.xs4all.nl/~ganswijk/chipdir/index.htm>. Can search chips by name or functional group.

Circuits Archive – www.ee.washington.edu/circuit_archive/. Schematics for circuits arranged by category.

Electrical and Electronics Engineering Virtual Library –

<http://webdiee.cem.itesm.mx/wwwvlee/>. Extensive links to resources in all areas of electrical engineering.

Electronic Engineers Master (EEM) – <http://www.eem.com/>. A compilation of catalogs of electronic components, equipment, and services.

IC Master Online – <http://icmaster.com/>. Information source for nearly 2 million chips.

SOCIETIES AND ORGANIZATIONS:

Electric Power Research Institute (EPRI) – <http://my.epri.com/portal/server.pt?>

Electrochemical Society – <http://www.electrochem.org/>

Electronic Industries Alliance (EIA) – <http://www.eia.org/>

Engineering Village -- via Lovejoy Library's **Compendex Web** link—see above.

Institute of Electrical and Electronics Engineers (IEEE) – www.ieee.org. “World’s leading professional association for the advancement of technology.”

Institution of Engineering and Technology (IET) [formerly, the **IEE**]. A leading, worldwide professional society for engineering and technology, the IET was formed in 2006 by the union of the IEE and the Institution of Incorporated Engineers (IIE) – <http://www.theiet.org/>

International Association for Pattern Recognition (IAPR) – <http://www.iapr.org/>

International Society for Optical Engineering (SPIE) – <http://spie.org/>. “An international society advancing an interdisciplinary approach to the science and application of light.”

Semiconductor Equipment and Materials International (SEMI) – <http://www.semi.org/>

NEED MORE HELP?

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