

Using IEEE Xplore

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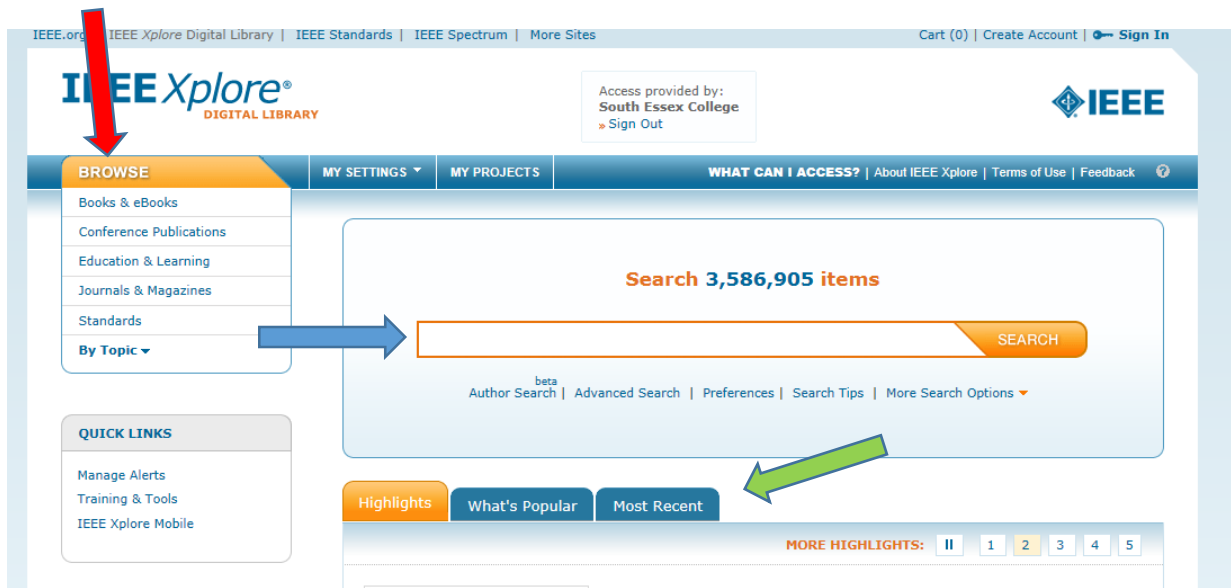
IEEE Xplore can be reached from the Online Resources page on the Learning Services section of the College website:

www.southessex.ac.uk > Learning Services > Resources available now > Online resources




If you accessing the resource offsite, you will need to use your Athens user name and password.

Please note, IEEE Xplore is a database of records, not a full-text repository. The College subscribes to many of the resources available in IEEE Xplore, but not all, so on occasion, you may not have access to the full-text. If you wish to see only those records that you have full text access to, please see "Limiting your results" below.

Starting out



This is the front page of IEEE Xplore. You can register with the site (it's free) and this is explored later. For now, take a look at what you can do from this first page.

-  Browse – you can take a look at the different categories IEEE Xplore offers, including By Topic. This is useful if you want to get a feeling for a subject category. If you do pick a sub-section, you can then do a simple search limiting the search terms of your sub-section.
-  Search bar – can be used to input your own search term(s).
-  Highlights/What's Popular/Most Recent – again, this allows you to browse through a selection of results based on either date of publication or number of hits (by other users).

Searching

To carry out a simple search, just type your terms into the search bar on the front page. To improve your search

- wildcards (using the asterisk symbol *)

For example, you can do the search **comput*** which will then pick up results with the terms compute, computing, computer, computational etc

- phrase searching (using speech marks)

For example, you can search for **“windows vista”** which will bring back results where the terms windows and vista appear as a phrase, and in that order (so not Windows released vista or vista, Windows)

- Phrase searching is also good for *avoiding* the IEEE Xplore search assistance. If you search for **network**, IEEE Xplore will search for network, networks, networking. If you search for **“network”**, you restrict the search to only this version of the word. Incidentally, IEEE Xplore will automatically look for both US and UK spellings, so if you were to look for **catalogue**, the search would also bring back results with **catalog** – unless, of course, you used the phrase searching option!

An example search

Using the simple search bar, let's carry out a search. The example will be **networking technologies**

The screenshot shows the IEEE Xplore Digital Library interface. At the top, there are navigation links for IEEE.org, IEEE Xplore Digital Library, IEEE Standards, IEEE Spectrum, and More Sites. A search bar at the top center contains the text "networking technologies" and a "SEARCH" button. Below the search bar, the results are displayed as a list of items, including "Networking Technologies", "Networking Technologies For Software Defined Radio Networks, 2006. SDR '06.1st IEEE Workshop On", "Networking Technologies For Software Define Radio Networks, 2007 2nd IEEE Workshop On", "Networking Technologies For Software Defined Radio (SDR) Networks, 2010 Fifth IEEE Workshop On", "Networking Technologies (EARTH)", "Network Technologies", "Network Technologies And Applications", "Network Technologies Rapid Development", "Network Technologies Knowledge", "Network Technologies Group", "Networked Technologies", "Network Technologies Objectives", "Networks Technologies", "Networked Digital Technologies, 2009. NDT '09. First International Conference On", "Optical Networking Technologies", "Wireless Networking Technologies", "Wireless Network Technologies", "Neural Network Technologies", "Network Access Technologies", and "Computer Network Technologies". The page also features a "Need Full-Text?" section with a "FREE TRIAL" button and a "QUICK LINKS" section with links for "Manage Alerts", "Training & Tools", and "IEEE Xplore Mobile".

Notice how a list of suggestions for related links has popped up. It's up to you if, when doing your search, you find this useful. This is the IEEE Xplore search assistance in action.

Carrying out this search brings back thousands and thousands of results – 165,938 to be precise!

The screenshot shows the IEEE Xplore search interface. At the top, the IEEE Xplore logo and 'DIGITAL LIBRARY' are visible. A navigation bar includes 'BROWSE', 'MY SETTINGS', 'MY PROJECTS', 'WHAT CAN I ACCESS?', and 'RESOURCES'. A search bar contains the text 'networking technologies' and a 'SEARCH' button. Below the search bar, a red arrow points to the 'FILTER THESE RESULTS' section on the left. This section includes a search box for filtering, radio buttons for 'All Results', 'My Subscribed Content', and 'Open Access', and expandable filters for 'CONTENT TYPE' (Conference Publications, Journals & Magazines, etc.), 'PUBLICATION YEAR' (with a range slider from 1923 to 2014), and 'AUTHOR'. The main 'SEARCH RESULTS' area shows 'You searched for: networking technologies' and '165,938 Results returned'. It includes options for 'Results per page' (25) and 'Sort by' (Relevance). Below this are two search results, each with a lock icon. The first result is 'Knowledge management: Integrating social networking technologies and a generative learning environment' by Chun, M.; Arling, P.; McQuaid, B., published in 2010. The second result is 'IEEE Standard for a Convergent Digital Home Network for Heterogeneous Technologies', published in 2013. On the right side, there are sections for 'SEARCH HISTORY' and 'STANDARDS DICTIONARY TERMS'.

This is obviously too high a number, but it is possible to reduce the number of results down, by filtering the list. Look at the red arrow – you can start making edits to your list of results at this point. (It is also possible to rethink your original search term, if you so desire).

Filtering results

Look at the left-hand column, 'Filter These Results'.

The default setting is 'All Results'. DON'T click on 'Open Access' – this will severely limit the number of results you will get back. You can click on 'My Subscribed Content' if you want to restrict your results, but please note, this may not bring back all the Open Access of freely available results.

Content type – you can decide here what sort of results you want to see: conference publications, journals and magazines, Early Access articles, books and e-books, standards or Education & Learning. The number in brackets is how many results you will be left with if you pick that option.

Publication year – you can either pick a specific year (click on the radio button, and you will be given the option to type in the year) or a range – use the slider option or type in the first and last year of your range.

Author – the list of most popular authors in the results list. Please note not ALL authors will be listed, just the most popular ones.

Affiliation – the organisation associated with a paper, usually either the publisher or the employer of one of the authors of the paper.

Publication title – where the most popular results are to be found. If you are wanting to search a particular publication, it is best to do an advanced search (see page 7) and choose this option up front.

Publisher – again, if this is an important consideration, choose this in the advanced search mode (page 6).

Conference country/conference location – this will *only* work for conference papers and proceedings, so clicking on any of these will drastically reduce the results in your original search.

Standard status – do not use, as the vast majority of results will not have this as a field, so again, you will drastically reduce the number of hits you get back.

Using the simple search option on the front page with the filtering option, should be enough to find useful results. However, you may want to explore other aspects of IEEE Xplore.

Advanced Searching

Other search options are below the search bar (on the front page):

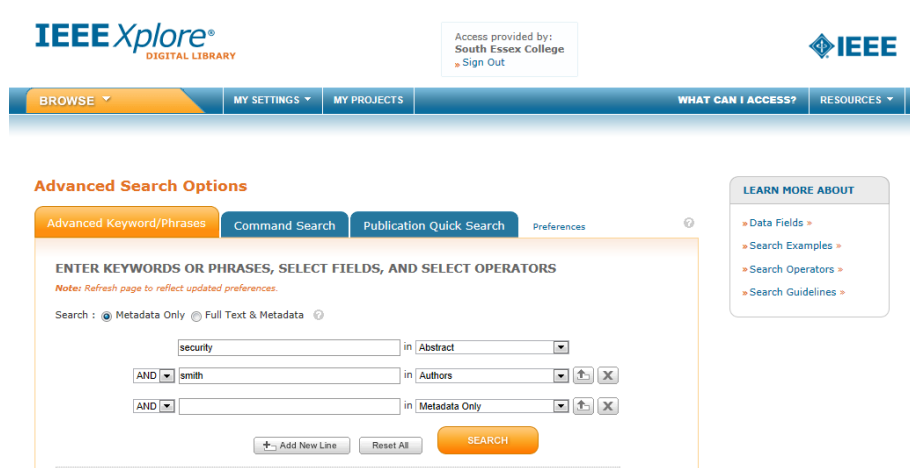


Author Search

This allows you to search specifically for an author, using as much information as you have about their name. You can use wildcards to replace characters (e.g. **Brew*** finds Brew, Brewer, Brewster). If you use an initial but the author has used his/her full forename, the search will still pick this up. However, using the first name will not bring up records where the author has used their initial.

Advanced Search

This is a more specific search, allowing you to search certain fields, and combine fields. For example, you could search for your particular term in the 'Abstract' field (thereby telling the search function that your term **MUST** appear in the 'abstract' of any article) and combine this with an Authors field search:



Notice how not all three fields have been used – three is just a suggestion. You can also increase the number of different fields to search, or combine them in different ways, using NOT or OR instead of AND – though this is getting into quite complex searching.

Preferences

This is a way of setting up IEEE Xplore to search and display results the way you want them to, but is only available if you register and log in.

Search Tips

A few useful tips on how the search function in IEEE Xplore works.

More Search Options

- Command search – this allows you to build your own search statement. For complex, tailored searches only.
- Publication Quick Search – if you are looking for a specific article or document, this is the easiest way of finding it. Fill in the form with as much information as you can.
- Saved Searches and Alerts – again, an option only for those who have registered and logged in. Can be useful if you want to set up regular searches on the same topics (e.g. tracking new articles published on a subject).
- Search History – for registered and logged in users only.

Understanding your results

Once you've done your search, you will be presented with a list of results. It is recommended you use the filtering option where possible, especially if you have more than about 50 results.

Using the original search of **networking technologies**, and filtering by **Content Type (Journals and Magazines)** and **Date (Single Year – 2011)**, the following results were obtained:

The screenshot shows the IEEE Xplore search results page. The search query is 'networking technologies'. The results are filtered by 'Content Type: Journals & Magazines' and 'Publication Year: 2011 - 2011', resulting in 1,454 results. The page displays two search results:

- Components and Interconnection Technologies for Photonic-Assisted Routers Toward Green Networks**
Nishimura, S.; Shinoda, K.; Lee, Y.; Ono, G.; Fukuda, K.; Yuki, F.; Takemoto, T.; Toyoda, H.; Yamada, M.; Tsuji, S.; Ikeda, N.
Selected Topics in Quantum Electronics, IEEE Journal of Volume: 17, Issue: 2
Digital Object Identifier: 10.1109/JSTQE.2010.2066261
Publication Year: 2011, Page(s): 347 - 356
Cited by: Papers (2)
IEEE JOURNALS & MAGAZINES
Quick Abstract | PDF (1466 KB) | HTML
- The potential impact of green technologies in next-generation wireline networks: Is there room for energy saving optimization?**
Bolla, R.; Davoli, Franco; Bruschi, R.; Christensen, K.; ...

Notice that the number of results has reduced dramatically to 1,454 (still too many!). There are various display options, to make viewing the results easier:

Results per page – change this so you can see 50, 75 or 100 results on the same page.

Sort by – this allows you to display the results in date order (oldest first, or newest), most cited papers, or in alphabetical order of name of the publication (e.g. journal title).

The buttons just above the list of results give you options, which increase if you are logged in:


Set Search Alert, Download Citations, Save to Projects and Email Selected Results are only available if you are registered.


Print – you can print your results. The default is to print off all the results on whatever page you happen to be on. However, you can select specific records, by ticking in the little box to the top-left of each result. **NOTE: this is not the same as printing out the actual article.**


Export Results – you can export up to 2000 records. The CSV file should open up automatically in Excel. As you are only getting, at best, the abstracts, this is not a suitable alternative to reading the full text!

Looking at each result, there are a number of things you can do.




 This allows you to ‘Save to projects’ but is only available for registered users. This is useful if you are saving articles for different assignments, and will assist you in creating bibliographies.

 You do NOT need to request permission from the copyright holder for standard academic use; this option is for reproducing other people’s work, and is not necessary for most students.

 Clicking on ‘Quick Abstract’ allows you to see the abstract/summary.

 Download the PDF of the article.

 Look at an HTML version of the result – this often allows interactive features not present in the PDF version.

The green padlock sign indicates access via the College subscription. A greyed-out padlock means we have not subscribed to the relevant publication, though you may still be able to access the full text via other means (checking the College’s Journals list, Google Scholar, Open Access).