Help with Searching

Introduction
When searching for an article, searches that are specific will run faster and be more likely to return the actual article(s) of interest. For best results, enter the minimum amount of information needed to uniquely identify the article(s), such as volume/page number, author names, and/or specific search advice.

Main Search Strategies
<table>
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<th>What you know</th>
<th>How to find the article(s)</th>
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<tbody>
<tr>
<td><strong>Citation</strong></td>
<td>Enter the year, volume and starting page number in appropriately marked fields in the Citation section of the Search form. This information may return few enough results to quickly retrieve the article of interest, making it unnecessary to enter data in the other search fields, though you can enter additional search terms as well.</td>
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</tbody>
</table>
| **Author(s)** | Author names can be entered in the Authors field in the format "Last Name, First Initial Second Initial" (i.e., Smith, JS or Smith, J). The last name is the main identifier. The initials are optional, but can be used to further specify your search. Author names can be further specified in the format of "Last Name, First Name" (i.e., Smith, Jennifer). This format will return all articles in which the author first name appears in the citation (e.g., Jennifer Smith, Jennifer A. Smith), as well as all articles in which only initials appear (e.g., J Smith, JS Smith). However, this search will not return articles listing authors such as John Smith or Jason Smith. Multiple author names should be separated by a semicolon (i.e., Smith, JS; Jones, D). Boolean operators are not available for the Author field. Compound names can also be searched. For example, to search for articles by Anthony D. Del Genio, enter his name as Del Genio, AD. Characters not falling in the English A-Z alphabet cannot be searched, and may be dealt with in one of two ways:  
  - Search using the English alphabet version of the letter, without any diacritical marks. To search on the name Grundström, enter the search as Grundstrom in the Authors field. Author names will not be highlighted in the search results using this method.  
  - Use a wildcard. A search for Grundstr* will also return results for Grundström. The portion of the name searched (before the wildcard) will be highlighted in the search results. |
| **Title** | Words in an article's title can be searched by using the Title field on the Search page. If you enter the full title, check off Phrase so that the exact phrase is searched. If you only enter some of the words in the title, select All in order to narrow your search results. Use the Any option if you enter several words that do not all have to be present in the title. |
**Key words**

If you want to search for specific words (key words) anywhere in an article (the title, abstract, or full text), use the Key words box on the Search form.

Use the Any option if you enter several words that do not all have to be present. The All option will search for articles that have all of the keywords that you entered. The Phrase option will look for articles containing the terms entered, in that exact order.

**Specify Journals to Search**

You can designate the source of the articles to be searched:

- HighWire-hosted only (searches only those journals hosted online by HighWire Press)
- From My Favorite Journals only (searches only those journals you have designated as My Favorite Journals; you must be signed in to use this option)
- All (including PubMed) (searches all journals hosted by HighWire Press plus the complete PubMed database)

**Limit Results**

The search form allows you to further limit your search results in the following ways:

- Specify date ranges. You can limit the search to recent articles or to older articles. The earliest date in the date range menus refers to the earliest date of posted content in any HighWire-hosted journal. The date of earliest content for any specific journal may differ, and this information may be found on the journal site.
- Limit to reviews. You choose to search on only review articles by checking the Reviews only box on the search form. The standard default searches all available articles.

**Format Results**

With the Format Results section, you can customize the display of your search results:

- Select a standard display option or a condensed version. In some browsers, you can hold your mouse over the 'pointer' (arrow) icon at the end of each condensed citation to view the complete citation as pop-up text.
- Select the number of citations to appear per screen of results.
- Choose the sort option to be used in the display. Best match displays the results based on relevance ranking. Newest first displays your results in date order, beginning with the most current.

For the relevance ranking, articles which contain the greatest number of the search terms in the greatest frequency will be listed first. In practice, this means that if you search on signal transduction (i.e., searching on signal transduction with the Any option selected), the search will find all articles which include either the term signal or the term transduction, but will list articles which use both terms before articles which use
Filtering by institution or author can be easily accomplished using the Key words field. For example, searching "Purdue" will return all articles by authors claiming a Purdue affiliation (as well as any articles written by someone named "Purdue"). This technique can also be used to narrow down an author search, especially when the author's name is fairly common. In this case, enter the author's name in the Author field, and the institution (or better yet, just a single word to identify it) in the Key words field.

```plaintext
To find articles citing a specific known article, enter the citation information in the Key words field in the following format:

journal volume starting page selecting the All option.

For example, the query terms

science 278 1632

were entered in the Key words field with the All option so that all articles that cited this article are returned.
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The search mechanism uses a "stemming" mechanism to find words which are similar to the words you enter. For example, a search on transcription may turn up articles containing similar words such as transcript and transcribed. These additional words may not always be highlighted in the text. To disable stemming, use the Phrase option or enclose each individual term in quotation marks.

**Using "Wildcards"**

The wildcard character (*) can be used to search the fragments of words, forcing a match with any word containing a given root. Although this function is somewhat duplicated with the Stemming feature, proper use of a wildcard can return a range of potentially interesting documents. For example, a search for child* will return articles containing child, childcare, and children; likewise, a search for phospha* will return articles containing phosphatase and phosphate.

Wildcards can also be used to truncate words before non-English characters such as an umlaut (û) or an accent (é). For example, a search for the author name Grundström can be searched as Grundstr*.

**Boolean Logic**

The Boolean logic terms (operators) AND, OR, NOT are available for searching in the Key words and Title fields. One or more Boolean operators can be used in a search query. The AND connector limits the search results to articles that contain all of the terms that are connected by AND. For example, a search for human AND diseases will return all articles that contain both the term human as well as the term diseases. This same search may also be entered as human diseases with the All radio button selected.

Using the OR operator (human OR diseases) would expand your search results to include articles containing either the term human or the term diseases. In practice, this will retrieve articles as diverse as human evolution and avian diseases. This search may also be entered as human diseases with the Any radio button selected.
Instead of selecting the **Phrase** option in the **Key words** or **Title** field, you can also use double quote marks (" ") to perform a search on an exact phrase. You can also use the Boolean Logic operators with 2 or more phrases, such as "human diseases" AND "insulin resistance" or search on "human diseases" "insulin resistance" and select the **All** option. Either approach will retrieve articles containing both phrases.

**Phrase Searching**

NOTE that when using Boolean terms, it does not matter if you select the **Any**, **All**, or **Phrase** option. They will all produce the same result when combined with Boolean operators.

**Capitalization and Punctuation**

Searches are case-insensitive.

Punctuation cannot be searched; search queries containing punctuation (such as an asterisk (*), parentheses, a plus (+), or a dash (-)) should replace the punctuation with a space and enclose the entire search term in quotes. A search for "Ag I"

will retrieve those articles containing the term Ag(I).

**Search Term Highlighting**

Search terms are highlighted in red text in the title display of the search result, as well as in bold in the KWIC text. Search terms are also highlighted in red text in the article and abstract full text when accessed from the search results page. A search on the phrase motor cortex

will highlight instances of the phrase "motor cortex", as well as any uses of the words motor or cortex.

Author names are highlighted in red text on the search results display.

**Search Tools**

There are several additional tools available to assist with searching. These tools can help you in reviewing searches you have performed, evaluating the citations in your search result, and in expanding or refining your current search results.
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<th>Search Tools</th>
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<tr>
<td><strong>Search History</strong></td>
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<tr>
<td>Follow the Search history link in the upper right corner of the search results page. For your current browser session, the 100 most recent searches performed in the past 120 minutes are displayed. From this page you may resubmit any of the displayed searches or use the rephrase option to modify a search and view the results.</td>
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<tr>
<td><strong>Rephrase Your Search</strong></td>
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<tr>
<td>The search form provided at the top of the search results page maintains all search parameters of that search. You may make any desired changes to the search and resubmit your search.</td>
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<tr>
<td><strong>KWIC</strong></td>
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<td>To help you select appropriate citations from your search results list, the &quot;Key Word In Context&quot; (KWIC) feature displays the first 2 instances of your search term(s), and accompanying text, as they appear in the full text of the article, when available. The KWIC text appears immediately after the citation information for each citation on your search results page. The KWIC text is displayed in your search results when you display 20 or fewer citations per screen in the standard citation format.</td>
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<tr>
<td><strong>Citation Map</strong></td>
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<td>Follow the View Citation Map link to the right of the article citation information, when available. Citation Map is a graphical representation of the articles citing or cited by your selected article. The map is based on the references found in the full text articles of the HighWire-hosted journals. The initial number of citations viewed in the map is 10, but you may increase this number if you like by selecting the desired number for display from the pull-down menu (found immediately below the map display) and clicking on the Update display button. Citation Map can be used to:</td>
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<tr>
<td>- Develop reading lists to get up to speed on a new topic</td>
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<td>- Generate bulk citation lists for import into literature-management programs</td>
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<tr>
<td>- Assist in refereeing or writing a review article</td>
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| Given a starting reference, Citation Map finds all articles related by citations either citing the article, or cited by it. The result set is expanded outward from the starting article to make a collection of all the articles related by citation to the starting article. By noting the number of times each article in
the collection is cited, the related papers with the greatest impact are graphed, along with the citing/cited-by relations among the articles in the collection. This shows you the most important papers related to a starting article, as well as temporal and "line-of-cite" relationships between these articles.

Citation information for all articles appearing in the citation map is available on this page, or you may click on a citation in the map display to view the citation in a separate window.

### MatchMaker

Follow the [Find more like this](http://highwire.stanford.edu/help/search_help.dtl) link to the right of the article citation information, when available.

MatchMaker provides matching of articles based on a weighted set of topics. This weighted set is generated from a single citation. The resulting MatchMaker pattern can also be manipulated graphically.

MatchMaker can be used to:

- Find articles that are topically similar to a given article
- Explore sets of similar articles by manipulating the MatchMaker pattern

Given a starting citation, MatchMaker extracts a pattern of relevant topics and their weights. This pattern is then used to search for similar articles, with the citation result set sorted with those articles most closely resembling the MatchMaker pattern shown first. The pattern (shown as a horizontal bar chart) can also be directly manipulated by using the mouse to single click on the desired setting of one or more topic weights. After manipulation, a search based on the changed pattern may be initiated by clicking on the match on changed MatchMaker pattern link.

### Instant Index

Follow the [Articles Indexed by Subject](http://highwire.stanford.edu/help/search_help.dtl) tab at the top of the search results.

Instant index uses the document clustering software from Vivisimo to provide search results grouped together, or "clustered," by meaningful subjects, based on words appearing in the abstract and title. The default clustering is available for searches with more than 50 results, and will analyze up to the first 500 citations in your current search result.

When you view the instant index for your search, you are shown the clustered subject categories in the left panel, and the corresponding citations in the right panel. The subject folders are sorted beginning with the largest category first, and the number of citations associated with each subject is in
There are two reasons that you may not get any articles back from your search:

- there may not be any articles matching the search criteria, or
- an error occurred with the search engine program itself.

  If your search was executed properly but did not return any articles, the message

  "Your search criteria matched zero articles."

  will be displayed at the top of the screen, along with some suggestions for modifying your search. In this case, the search can be broadened as described above to redefine the search. Appropriate use of wildcards with search terms, or author names for which you are not sure of the exact spelling, can help. There is also the possibility that no articles matching your interests are in the journal's collection.

When a true search error occurs, the message
"There was a problem with our search system."

will appear at the top of the screen. If you are unable to resolve the error, please follow the Contact Us link and submit a message via the form describing the problem.