

## ILab Guide to Literature Searches

In order to find supporting data and effective methods to carry out your experiments, you will need to consult published articles. Searching published articles is a very important part of research and there are powerful databases to help you.

### Resources:

1. Web of Science (UMass has a subscription).

URL: <http://www.library.umass.edu/research/html/webofs.html>

If you follow the links for 'Web of Science,' then click on 'general search' you will be able to search by author or keyword. This database is excellent; it covers the major journals that you are likely to need and it goes far back in time (to 1900, as of now). For newer publications, it can also provide the abstract in addition to the full citation information.

Note that Web of Science does not provide the articles themselves; for this you can either click the 'UM Links' button on the webpage or obtain the article by separate means.

2. Journal webpages: UMass has subscriptions to many journals, and many of these are available on-line. From the UMass library website ([http://www.library.umass.edu](#)), you can click on the tab labeled 'e/journals' and search for 'journal title' and find a link (if we have an electronic subscription). In some cases, we have only a subscription to printed copies and you must go to the library to read and/or photocopy.

In some cases you can go directly to the journal website and have permission to download articles if you are within the UMass domain. For example, *Physical Review Letters*: <http://prl.aps.org/>. This also has links to Phys. Rev. A, B, C, D, and E.

Downloaded articles are typically in pdf format, which you can print in ILab.

### Literature-search exercise (Required)

Please use the Web of Science to answer the following questions. Please type or copy/paste the results into a word document (or pdf) and save it. Please then print it out and submit it to the instructors. **Each student should do this on his or her own, not in groups** (though you may seek general guidance from your peers or instructors).

1. Your name (please don't forget this).

2. Look for articles by people with the same first and middle *initials* and same last name as yours (*e.g.*, for me this would be A. D. Dinsmore).

(a) report the number of articles.

(b) provide the full citation information for the **first one** that is listed.

If you do not find any, then look for people with only the same first initial and last name (*e.g.* A. Dinsmore) and answer the above questions.

If you still do not find any, look for authors with the same last name and *any* initials and answer the above questions.

3. Search for articles by Max Planck.

(a) How many are listed?

(b) What is the full citation of the earliest article (the first one written, not the first one listed)?

(c) What is the full citation information of the most *recent* article that cites the article found in (b)?