

Guidelines for Literature References

No technical paper, thesis, or dissertation is complete without literature references. It is absolutely essential to conduct a thorough survey of the relevant literature and a careful analysis of the work that has already been done in relation to the topic of your own research.

The reference section of your paper/thesis/dissertation must list all the articles, books, technical reports, and conference proceedings that have been cited within the body of the document. This section must contain only items that have been cited.

The formatting of the citations should follow accepted practices in your field. The instructions to authors provided by a widely cited journal in your area will cover most of the items that need attention. A reference in a journal would include, at a minimum, the following elements: the authors, journal name (usually abbreviated), volume number, beginning page number, and year of publication. Example:

Citation format for American Chemical Society (ACS) journals:

Glukhovtsev, M. N; Pross, A.; Radom, L. *J. Phys. Chem.* **1996**, *100*, 3498.

This refers to a paper published in the year 1996, in volume 100 of the *Journal of Physical Chemistry*, starting on p. 3498. Most engineering and science journals use page numbering that spans all issues, so an issue number is not usually cited. However, if the publication starts the page numbering at 1 in each issue (e.g., *Physics Today*), the issue number should be cited. There are considerable variations between journals in the specific format in which the author names are listed (“last name, initial” or “initial, last name”) and the order in which the rest of the information (year, volume, page numbers, etc.) is organized. Here are two other styles:

(a) M. N. Glukhovtsev, A. Pross, and L. Radom, *J. Phys. Chem.* **100**, 3498 (1996).

(b) M. N. Glukhovtsev, A. Pross, and L. Radom, *J. Phys. Chem.* 100 (1996) 3498.

Some other variations can be observed in the examples below.

Complete citations are preferred in technical papers, theses, and dissertations. A complete citation includes, in addition to the information typically required by the journal, the complete title of the paper as well as the beginning and ending page numbers.

A “complete” citation of the reference above using the ACS format is:

Glukhovtsev, M. N; Pross, A.; Radom, L. “Acidities, Proton Affinities, and Other Thermochemical Properties of Hypohalous Acids HOX (X = F-I): A High-Level Computational Study,” *J. Phys. Chem.* **1996**, *100*, 3498-3503.

In engineering and science, it is common to number the references. If a numbering system is followed, the first citation appearing in the document is given the number 1, and subsequent citations are numbered in increasing order. See Examples A and B below.

In certain disciplines (or journals), the citations are arranged in alphabetical order (by the last name of the first author). In this case, the references are typically not numbered. See Example C below.

Under no circumstances should a reference be listed if it is not cited somewhere in the text of the document.

Example A [From B. Ramachandran, *J. Chem. Phys.* **112**, 3680 (2000).]

Quasiclassical trajectory calculations on the S4 surface¹ were able to reproduce, near-quantitatively, the state-to-state integral cross sections, the OH rotational distributions, the OH $v'=1/v'=0$ branching ratios,¹ and energy disposal patterns² observed in the experiments of the Zare group.^{3,4} Variational Transition State Theory (VTST)⁵ calculations of the thermal rate coefficients on this surface also led to excellent agreement with experimental values over a broad temperature range.⁶

¹ B. Ramachandran, E. A. Schrader, III, J. Senekowitsch, and R. E. Wyatt, *J. Chem. Phys.* **111**, 3862 (1999).

² B. Ramachandran, *J. Chem. Phys.* **112**, 3680 (2000).

³ R. J. Rakestraw, K. G. McKendrick, and R. N. Zare, *J. Chem. Phys.* **87**, 7341 (1987).

⁴ R. Zhang, W. J. van der Zande, M. J. Bronikowski, and R. N. Zare, *J. Chem. Phys.* **94**, 2704 (1991).

⁵ D. G. Truhlar, A. D. Issacson, and B. C. Garrett, in *Theory of Chemical Reaction Dynamics*, edited by M. Baer (CRC Press, Boca Raton, FL, 1985), Vol. **4**, p.65.

⁶ S. Skokov, S. Zou, J. M. Bowman, T. C. Allison, D. G. Truhlar, Y. Lin, B. Ramachandran, B. C. Garrett, and B. J. Lynch, *J. Phys. Chem. A* **105**, 2298 (2001).

Notes on Example A:

When citations are shown as superscripts, the numbers are placed *after* the punctuation. Note the placements of Ref. 1 (the second occurrence), Refs. 3 & 4, and Ref. 6.

Example B [J. S. Bell, "On the Einstein Podolsky Rosen Paradox," *Physics*, **1**, 195 (1964).]

The paradox of Einstein, Podolsky, and Rosen [1] was advanced as an argument that quantum mechanics could not be a complete theory but should be supplemented by additional variables. These additional variables were to restore to the theory causality and locality [2]. In this note that idea will be formulated mathematically and shown to be incompatible with the statistical predictions of quantum mechanics.

1. A. Einstein, N. Rosen, and B. Podolsky, *Phys. Rev.* **47**, 777 (1935); see also N. Bohr, *ibid.* **48**, 696 (1935), W. H. Furry, *ibid.* **49**, 393 and 476 (1936), and D. R. Inglis, *Rev. Mod. Phys.* **33**, 1 (1961).

2. "But one supposition we should, in my opinion, absolutely hold fast: the real factual situation of the system S_2 is independent of what is done with system S_1 which is spatially separated from the former." A. Einstein, in *Albert Einstein: Philosopher Scientist*, Edited by P. A. Schilp p. 85, Library of Living Philosophers, Evanston, Illinois (1949).

Notes on Example B:

When citations are shown in square brackets, the numbers are usually placed *before* the punctuation. See the placement of [2]. However, some journals allow placement after the punctuation. Either style is acceptable, provided it is *consistently* used.

Comment: Many scientists consider this paper by John Bell to be among the most significant accomplishments of the human intellect in all of history.

Example C: [A paragraph from a paper by W. Dai et al. *International Journal of Numerical Methods for Heat and Fluid Flow* (accepted, 2006).]

Ultrashort-pulsed lasers with pulse durations of the order of sub-picosecond to femtosecond domain possess exclusive capabilities in limiting the undesirable spread of the thermal process zone in the heated sample (Tzou et al., 2002). They have been widely applied in structural monitoring of thin metal films (Opsal, 1991), laser micromachining (Knapp et al., 1990) and patterning (Elliot and Piwczyk, 1989), structural tailoring of microfilms (Grigoropoulos, 1994), and laser synthesis and processing in thin-film deposition (Narayan et al., 1991).

Elliot, D. J. and Piwczyk, B. P. (1989), "Single and multiple pulse ablation of polymeric and high density materials with excimer laser radiation at 193 nm and 248 nm," *Mater. Res. Soc. Symp. Proc.*, Vol.129, pp. 627-636.

Grigoropoulos, C. P. (1994), "Heat transfer in laser processing of thin films," in: *Annual Review of Heat Transfer V*, Hemisphere, New York.

Knapp, J. A., Borgesen, P. and Zuhr, R. A. (1990), *Beam-solid Interactions: Physical Phenomena*, *Mater. Res. Soc. Symp. Proc.*, Vol. 157. Materials Research Society, Pittsburgh.

Narayan, J., Gosbole, V. P. and White, G. W. (1991), "Laser method for synthesis and processing of continuous diamond films on nondiamond substrates," *Science*, Vol. 52, pp. 416-418.

Opsal, J. (1991), "The application of thermal wave technology to thickness and grain size of aluminum films," *SPIE*, Vol. 1596, pp.120-131.

Tzou, D. Y., Chen, J. K. and Beraun, J. E. (2002), "Hot-electron blast induced by ultrashort-pulsed lasers in layered media," *Int. J. Heat Mass Transfer*, Vol. 45, pp. 3369-3382.

Notes on Example C:

This style of citation is called the "Harvard style." Note that the citations are placed before the punctuation. The references themselves are arranged alphabetically by the last name of the first author. Because of this alphabetical organization, there is no need to number the references (the numbers are never used in the text itself) but some journals number them anyway.

Note also the placements and formats used for the year of publication, volume number, and page numbers.

In the Harvard style, if the paper has one author, the reference cites that author's name, as in (Opsal, 1991). If the paper has two authors, both authors' names are used, as in (Elliot and Piwczyk, 1989). If the paper has more than two authors, the first author's name is used, followed by "et al.," as in (Knapp et al., 1990).

In some cases it may be necessary to reference two or more papers by the same group of authors from the same year. In that case, an additional letter is added to the date. For example, two different publications by Opsal in the same year would be referenced as (Opsal, 1991a) and (Opsal, 1991b), and the added letter would also be appended to the date in the citation, as in:

Opsal, J. (1991a), "The application of thermal wave technology to thickness and grain size of aluminum films," *SPIE*, Vol. 1596, pp.120-131.

Opsal, J. (1991b), Some other paper relevant for this article.

Special cases:

There are always special circumstances that need special attention. Here are a couple that some students may have to deal with:

1. Large collaborations are the norm in some disciplines like high energy particle physics, nuclear physics, etc. These collaborations often involve hundreds of members and listing all of their names may take up several *pages*. In such cases, it is perfectly reasonable to abbreviate the author list. Here are two examples:

[1] CDF Collaboration, F.Abe *et al.*, *Phys. Rev. Lett.* **74**, 2626 (1995).

[2] DØ Collaboration, S.Abachi *et al.*, *Phys. Rev. Lett.* **74**, 2632 (1995).

The DØ Collaboration, the team that discovered the top quark at Fermi National Accelerator Facility in Batavia, IL, consists of over 300 individuals from all over the world. The complete listing of their names and institutional affiliations take up almost three whole pages in a typical printed paper.

2. Some journals published by American Institute of Physics (such as the *Physical Review*) have gone to a document numbering system rather than page numbers. Each document is given a unique number which denotes its placement within the journal. Then each page of the paper is numbered starting with 1. Example:

CDF Collaboration, D. Acosta *et al.*, *Phys. Rev. D* **71**, 052003 (2005).

The first page of this paper will be numbered 052003-1, the second page 052003-2, and so on. Obviously, in such cases, the beginning and ending page numbers need not be cited even in a complete citation.

3. Although citations to web pages are strongly discouraged (see next section), there are a few well-established web pages that are archives of reprints/preprints. These are widely cited by scientists working in certain disciplines. Example:

DØ Collaboration, V. Abazov *et al.*, hep-ex/0504058.

Additional considerations:

Additional considerations, especially for theses and dissertations, compiled by Dr. Steven A. Jones are listed on the next page.

Rules for References (compiled by Professor Steven A. Jones)

1. Any reference that is listed in the reference section must be cited in the text of your dissertation, thesis, practicum, proposal, or journal article.
2. Use references primarily to back up *specific statements* you make.
3. You may use whichever reference format is appropriate for your field. Apply the style you select consistently throughout your document. Carefully study the format specifications from a major journal in your discipline. Regardless of style, your references must include:
 - a. A complete author list,
 - b. The title of the journal article,
 - c. The name of the journal,
 - d. The volume of the journal,
 - e. The page numbers of the article (beginning and end),
 - f. The year of the article.
4. Citations within your text must follow the format for the citations at the end of the work. An example of the “author, date” format would be:

“Nussbaum et al. (1990) state that ...,” or “Myocardial infarction is the result of coronary artery thrombosis (Nussbaum et al., 1990).”
5. Reference authors by last name, i.e., do not say “Richard Nussbaum et al. (1990) state that” The proper use is “Nussbaum et al. (1990) state that”
6. For numbered references, citations must be made in the order of the list of references, i.e., do not cite the reference numbered 14 before the reference numbered 9. Example: “Nussbaum et al.⁷ and Hodge et al.⁸ showed that”
7. Remember that “et al.” is an abbreviation for “et alii,” so there is a period after al., but not after et.
8. Avoid long quotes from an article. Remember that you are digesting the information from a variety of articles to make a point in your thesis.
9. You must never include a piece of an article (even a short phrase) without putting quotations around it and citing the reference from which it came. Paraphrases from a published work must also be accompanied by the citation. Failure to do this constitutes plagiarism and is *illegal*.
10. Citations should be mainly journal articles and books with occasional references to published proceedings or abstracts. *In general, references to web pages are not to be used!* Instead, you must find an alternative source for the statement you wish to cite. [There are two good reasons for this requirement. (1) Web pages are not refereed, so there is no immediate way of determining their validity. (2) Web pages are volatile. If someone goes back to the same site one year from now, or even earlier, there is no guarantee that the same information will be there.] Exceptions should be cleared with the instructor (if you are writing for a course) or the advisor and advisory committee (for theses/dissertations).