

How to use the IEEE Reference Format

The following document is an edited version of the "IEEE Referencing Style Sheet" [1] with significant additions from the "IEEE Citation Style Guide" [2].

IEEE style is used mainly in Electrical Engineering, Computer Engineering and Computer Science. This style sheet gives general guidelines based on the IEEE's citation and referencing guide <https://iee-dataport.org/sites/default/files/analysis/27/IEEE%20Citation%20Guidelines.pdf>

I. Guidelines for Citations in text

When writing a piece of academic work, any sources which have been used must be acknowledged. This acknowledgement is done by including a brief in-text 'citation' within the main body of the writing, adjacent to where the referenced material is in the text.

The IEEE style is a numeric style, where citations are numbered [1] in the order of appearance. This citation leads the reader to a full reference to the source in the list of references at the end of the work. Each citation number should be enclosed in square brackets on the same line as the text before any punctuation, with a space before the bracket [2]. Once a source has been cited, the same number is re-used for all subsequent citations to that same source. Page numbers are required within citations where material is directly quoted or when referring to a specific part of the source such as a difficult to find detail such as a figure or an equation. The page numbers appear within the square brackets after the citation number after a colon.

Do not combine references. There must be only one reference with each number. In the text of the document, when citing a work with multiple authors, abbreviate the list by using 'et al.' e.g. only if there are three or more co-authors. In general, authors do not need to be mentioned by name in the text; the numeric citation in square brackets is sufficient.

Some examples of IEEE style citation in text are:

- "The theory was first put forward in 1987 [1]."
- "For example, see [7]."
- "Several recent studies [3, 4, 15, 16] have suggested that..."
- "During their research, Fan, et al. [4] discuss lasers in detail."
- "This development is given in [1: 3-5]."

II. Guidelines for the References section

At the end of the document work, full details of all the sources cited in the text are given in the section headed *References*. The references are listed in numeric order and are to follow IEEE formatting guidelines. The reference list should allow anyone reading the work to identify and find the material cited.

In IEEE style the reference list should be formatted in the following way:

- Align references left.
- Single-space each entry; double-space between every new entry.
- Place number of entry at left margin enclosed in square brackets.
- Indent the text of entries.
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The IEEE citation style has 3 main features:

- The author name is first name (or initial) and last.
- The title of an article (or chapter, conference paper, patent etc.) is in quotation marks.
- The title of the journal or book is in italics.

These conventions allow the reader to distinguish between types of reference at a glance. The correct placement of periods, commas and colons and of date and page numbers depends on the type of reference cited. Periods are placed after author and book title. Page numbers are shown with the abbreviation pp. All months are abbreviated to the first three letters.

Authors names:

In the full reference list at the end always give all authors' names. In the reference list, 'et. al.' is used only when there are six or more authors.

Standard Abbreviations:

Standard abbreviations for journal titles, conference titles, and some other common words should be used in the reference list. Some of these standard abbreviations may be found at the following

- IEEE Transactions, https://www.ieee.org/documents/trans_journalnames.pdf
- IEEE conference titles, <http://www.ieee.org/documents/ieeecitationref.pdf>
- Other Journals (non-IEEE), https://www.elsevier.com/data/promis_misc/BMCL_Abbreviations.pdf
- words used in references for the IEEE style, http://www.ieee.org/documents/style_manual.pdf

III. Reference examples

There are standard reference formats for most types of document. Below are examples of references of the most common types of document. Each of the following gives a suggested standard format for the reference followed by an example. Note, [10] has been used as the reference number for each of these examples.

1. Book

[Ref number] Author's initials. Author's Surname, *Book Title*, edition (if not first). Place of publication: Publisher, Year.

[10] I.A. Glover and P.M. Grant, *Digital Communications*, 3rd ed. Harlow: Prentice Hall, 2009.

2. Book chapter

[Ref number] Author's initials. Author's Surname, "Title of chapter in book," in *Book Title*, edition (if not first), Editor's initials. Editor's Surname, Ed. Place of publication: Publisher, Year, page numbers.

[10] C. W. Li and G. J. Wang, "MEMS manufacturing techniques for tissue scaffolding devices," in *Mems for Biomedical Applications*, S. Bhansali and A. Vasudev, Eds. Cambridge: Woodhead, 2012, pp. 192-217.

3. Electronic Book:

If the e-book is a direct equivalent of a print book, reference it as a normal print book. If available only as an electronic file, then use the following form

[Ref number] Author's initials. Author's Surname. (Year, Month Day). *Book Title* (edition) [Type of medium]. Available: URL (last accessed: dd-Mon-yyyy).

[10] W. Zeng, H. Yu, C. Lin. (2013, Dec 19). *Multimedia Security Technologies for Digital Rights Management* [Online]. Available: <http://goo.gl/xQ6doi> (last accessed: 12 Nov 2017).

4. Journal article

[Ref number] Author's initials. Author's Surname, "Title of article," *Title of journal abbreviated in Italics*, vol. number, issue number, page numbers, Abbreviated Month Year.

[10] F. Yan, Y. Gu, Y. Wang, C. M. Wang, X. Y. Hu, H. X. Peng, et al., "Study on the interaction mechanism between laser and rock during perforation," *Optics and Laser Technology*, vol. 54, pp. 303-308, Dec 2013.

Note: the example article is from a journal which does not use issue numbers, so they are not included in the reference.

5. E-Journal article

Cite articles which are pdf copies of the print journals, as the print journal. If the journal does not have a print version, use the following format.

[Ref number] Author's initials. Author's Surname. (Year, Month). "Title of article." *Journal Title* [type of medium]. volume number, issue number, page numbers if given. Available: URL (last accessed dd-MON-year).

[10] M. Semilof. (1996, July). "Driving commerce to the web-corporate intranets and the internet: lines blur". *Communication Week* [Online]. vol. 6, issue 19. Available: <http://www.techweb.com/se/directlinkcgi?CWK19960715S0005> (last accessed 07-Nov-2017).

6. Conference papers

[Ref number] Author's initials. Author's Surname, "Title of paper," in *Name of Conference*, Location, Year, pp. xxx.. (may use the doi in lieu of page numbers).

[10] S. Adachi, T. Horio, T. Suzuki. "Intense vacuum-ultraviolet single-order harmonic pulse by a deep-ultraviolet driving laser," in *Conf. Lasers and Electro-Optics*, San Jose, CA, 2012, pp.2118-2120.

[10] W. Alexander Baker, Jr., Susan C. Schneider and Edwin E. Yaz. "Robust H^∞ Dynamic State Feedback Control for Nonlinear Discrete-time Systems via LMI-Based Regional Eigenvalue Assignment", in *Proceedings of the ASME 2016 Dynamic Systems and Control Conference, Volume 1*, Minneapolis MN, 2016, doi: 10.1115/DSCC2016-9762.

7. Reports

The general form for citing technical reports is to place the name and location of the company or institution after the author and title and to give the report number and date at the end of the reference. If the report has a volume number add it after the year.

[Ref number] Author's initials. Author's Surname, "Title of report," Abbreviated Name of Company., City of Company., State, Report number, year.

[10] P. Diament and W. L. Luptakin, "V-line surface-wave radiation and scanning," Dept. Elect. Eng., Columbia Univ., New York, Sci Rep. 85, 1991.

8. Patents

[Ref number] Author's initials. Author's Surname, "Title of patent," Country where patent is registered. Patent number, Abbrev of Month Day Year.

[10] J. P. Wilkinson, "Nonlinear resonant circuit devices," U.S. Patent 624 125, July 16 1990.

Note: Use "issued date" if several dates are given.

9. Standards

[Reference number] *Title of Standard*, Standard number, date.

[10] *Shunt power capacitors*, IEEE standard 18-2012, 2013.

10. Theses/Dissertations

[Ref number] Author's initials. Author's Surname, "Title of thesis," Designation type, Abbrev. Dept., Abbrev. Univ., City of Univ., State, Year.

[10] J. O. Williams, "Narrow-band analyser," Ph.D. dissertation, Dept. Elect. Eng., Harvard Univ., Cambridge, MA, 1993.

11. Datasheets

[Ref number] Author's initials. Authors Surname, "Title of Datasheet," Part datasheet, Publication date [Latest revision date].

[10] Texas Instruments, "High speed CMOS logic analog multiplexers/demultiplexers," 74HC4051 datasheet, Nov. 1997 [Revised Sept. 2002].

[10] Texas Instruments, "TL08xx JFET-Input Operational Amplifiers", TL081 datasheet, [Online], Feb 1977, [Revised: May 2015]. Available <http://www.ti.com/lit/ds/symlink/tl084.pdf> (last accessed 07 Nov 2017).

12. Online Documents

When using documents such as a report, conference paper, standard, patent or thesis online that also exist as an identical print equivalent i.e. with the same format and pagination such as a pdf, it should be referenced as the print version.

If the document is truly available on-line only, a standard reference template includes adding the material type in square brackets e.g. [Online] after the document title; or if there is no specific document title, it can be placed after the document number (e.g. patent number).At the end of the reference add:

Available: URL. and the date it was last accessed online.

[10] M.R. Brooks, "Musical toothbrush with adjustable neck and mirror," U.S Patent 326189 [Online], May 19 1992. Available: <http://goo.gl/VU1WEk> (last accessed: 12 Nov 2017).

13. Websites

Note: Include as much of the key information as can be found for a given website. If a web page has no personal author, use a corporate author if available. Failing that, use either Anon. (for anonymous) or the title of the site.

[Ref number] Author's initials. Authors Surname. (Year, Month. Day). *Title of web page* [Online]. Available: URL

[10] BBC News. (2013, Nov. 11). *Microwave signals turned into electrical power* [Online]. Available: <http://www.bbc.co.uk/news/technology-24897584> (1 Jan 2010).

IV. Concluding Remarks

The information above reflects the author's understanding of the IEEE citation format. The interested student will confirm this information by reviewing the "V. Editing References" chapter in the IEEE Editorial Style Manual [3]. The style manual also includes important information on formatting other sections of manuscripts.

V. References

[1] University of Bath. "IEEE referencing style sheet", (May 2015, updated Aug 2017) [Online]. Available: URL <http://www.bath.ac.uk/library/infoskills/referencing-plagiarism/ieee-style.html>. (last accessed 07 Nov 2017).

[2] International Journal of Simulation Systems, Science and Technology. "IEEE Citation Style Guide" (pdf) [Online] Available: URL <http://www.ijssst.info/info/IEEE-Citation-StyleGuide.pdf> . (last accessed 07-Nov-2017).

[3] IEEE Periodicals. "IEEE Editorial Style Manual" (pdf) (22 Jul 2016), IEEE. [Online] Available: URL http://ieeauthorcenter.ieee.org/wp-content/uploads/IEEE_Style_Manual.pdf, (last accessed 09 Nov 2017).

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10 Nov 2017

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