

IEEE Citation Format

Within your work, use only a number in brackets to cite each reference in order of its appearance in the text. This number will correspond to the entry's order on the Reference page. On the Reference page itself, entries show up in order of appearance, not alphabetically.

In-Text Citations

There are two ways to do include in-text citations, and they have more to do with readability than anything else.

Example 1

Include the citation at the end of the paraphrased sentence.

Because technical and scientific evidence is often incredibly intricate, visuals can be the most efficient and effective means of communicating complexities. Extensive research demonstrates that creating informational visuals increases people's ability to understand the information they convey [6-10]. Text is the slowest way to reach audiences; graphs are quicker, and pictures the quickest way of all [11]. So, if your aim is to deliver complexity efficiently, using graphs and pictures in your slides can serve you well.

Example 2

Use the citation in place of actual words in the sentence. We believe that this practice is less desirable, for readability purposes.

...as demonstrated in [3].

or

...according to [4] and [6–9].

Notes

- All quoted matter must be referenced in the text. There must be an entry in the References page that compliments that in-text citation.
- Within the paragraph or sentence, the in-text citations should appear in square brackets, inside the end punctuation.
- Grammatically, in-text citations may be treated as if they are footnotes (preferred) or nouns (very much less preferred for readability).
- Editing of references may require careful renumbering of references, as well as the citations in text.
- For more complete information, please see the IEEE Editorial Style Guide at https://www.ieee.org/documents/style_manual.pdf. Information on references begins on page 34.

Formatting the Reference Page

Set reference numbers flush left, in a column of their own, hanging farther left than the body of the reference. Place reference number in line with the first line of the entry and enclosed in square brackets. See below for the general idea of how to set up the page.

- For names, use the first name's initial only. If there is a middle name, use the initial only. Spell out last names fully.
- Multiple authors:
 - Two authors: A. B. Lastname and C. D. Writer
 - Three or more authors: A.B. Lastname *et al.*,
- For references with two authors, use an "and" between their names.
- For references with three names, put a comma between them all. In addition, place an "and" before the last author.
- If there are more than three names, use "et al." One example would be "A. B. Lastname et al."
- Use commas to set apart "Jr.," "Sr.," and "III," and so forth.
- Do not combine references. There must be only one reference with each number.

Books

Notes

- For book titles, capitalize all significant words.
- Italicize the book's title.
- For individual chapters, capitalize only the first word, the first word after a colon, and proper nouns.

Basic Format

[#] A. B. Lastname, "Title of chapter in the book," in *Title of The Published Book*, xth ed. City of Publisher, State/Province, Country if not a major city: Abbrev. of Publisher, year, ch. x, sec. x, pp. xxx–xxx.

Examples

[1] P. E. Brewer. *International Virtual Teams: Engineering Global Success*. Hoboken, NJ: Wiley-IEEE Press, 2015.

[2] R. L. Myer, "Parametric oscillators and nonlinear materials," in *Nonlinear Optics*, vol. 4, P. G. Harper and B. S. Wherret, Eds. San Francisco, CA: Academic, 1977, pp. 47–160.

Periodicals and Journals

[#] A. B. Lastname, "Name of paper," Abbrev. *Title of Periodical*, vol. x, no. x, pp. xxx–xxx, Abbreviated Month, year.

Notes

- For the article title, capitalize only the first word, the first word after a colon, and proper nouns. Use double quote marks around the article title.
- Either spell out completely all of the names of the journals OR use the abbreviation set provided in the “Reference Abbreviations” section following. Chose one method and use it consistently.
- Italicize the journal’s title.
- For any article with more than six authors, use “et al.” after the first author’s name.
- For any article with one to five authors, list all names.

Examples

[1] P. M. Dombrowski, "The evolving face of ethics in technical and professional communication: Challenger to Columbia," *Professional Communication, IEEE Transactions on* , vol. 50, no. 4, pp. 306–319, Dec., 2007.

[2] C. Jian and M. Zaletel, “Existence of featureless paramagnets on the square and honeycomb lattices in 2+1 dimensions,” *Physical Review B*, vol. 93, no., 3, pp. 035114/1-035114/11, Jan., 2016.

Online Periodicals and Journals

A. B. Lastname. (mo, day, yr). Title (edition) [Type of medium]. Available: [http://www.\(URL\)](http://www.(URL)) Aug. 8, 2001 (last date accessed).

Notes

- Use DOIs when possible.
- To cite online sources, follow the standard citation for the source given previously and add the Digital Object Identifier (DOI) at the end of the citation, or add the DOI in place of page numbers if the source is not paginated.

Example

[1] J. Jones. (May, 1991). Networks (2nd ed.) [Online]. Available: <http://www.atm.com>, Aug. 8, 2013 (last date accessed).

[2] C. Jian and M. Zaletel, “Existence of featureless paramagnets on the square and honeycomb lattices in 2+1 dimensions,” *Physical Review B*, vol. 93, no., 3, pp. 035114/1-035114/11, Jan., 2016. DOI: 10.1103/PhysRevB.93.035114.

Technical Reports

[#] A. B. Lastname, “Title of report,” Abbrev. Name of Company, City of Company, Abbrev. State, Rep. xxx, year.

Note

- When citing technical reports, place the name and location of the company or institution after the author and title; then also give the report number, if available.
- If there are no people listed as the author, use the company or organization name.

Examples

- [1] S. Jones and D. Steirer, "Clear communication—the competitive edge," in Professional Communication Conf., Banff, AB, 1994, pp. 168–172.
- [2] J. H. Davis and J. R. Cogdell, "Calibration program for the 16-foot antenna," *Elect. Eng. Res. Lab.*, Univ. Texas, Austin, Tech. Memo. NGL-006-69-3, Nov. 15, 1987.
- [3] R. E. Haskell and C. T. Case, "Transient signal propagation in lossless isotropic plasmas," USAF Cambridge Res. Labs., Cambridge, MA, Rep. ARCRL-66-234 (II), 1994, vol. 2.
- [4] United States Department of the Interior, Bureau of Indian Affairs. Office of Indian Energy and Economic Development, Division of Energy and Mineral Development. 2010. "Native American Wind Resource Atlas," U.S. Government Printing Office, Washington DC, 2010.

Technical Handbooks

[#] Name of Manual/Handbook, x ed., Abbrev. Name of Co., City of Co., Abbrev. State, year.

Note

- Because most handbooks do not provide individual authors, use the company as the author. (Of course, if you have an author, include that person.)

Examples

- [1] J. Mangum and R. Warmels. *ALMA Cycle 4 Technical Handbook*, 4th ed. Santiago, Chile, 2016. Available: <https://almascience.eso.org/documents-and-tools/cycle4/alma-technical-handbook>
- [2] Honeywell Analytics, "Technical Handbook: Searchline Excel infrared gas detectors," Honeywell, Lincolnshire, IL, 2012.

Conference Articles or Proceedings

[#] A. B. Lastname, "Title of paper," in Unabbreviated Name of Conf., City of Conf., Abbrev. State (if given), year, pp. xxx–xxx.

- [1] M. Ahmed, I.E. Gonenli, G.S. Nadvi, R. Kilaru, D.P. Butler, and Z. Çelik-Butler, "MEMS sensors on flexible substrates towards smart skin, in *IEEE Sensors 2012*, Taipei, Taiwan, 2012, pp. 1-4.

Notes

- Cite technical articles published in conference proceedings by listing the author/s name(s) and title of the paper, followed by the name of the conference publication in italics (using the standard abbreviations below) and by the location of the conference, if available.

- Write out all remaining words, but omit most articles and prepositions such as “of the” and “on.” For instance, Proceedings of the 1996 Robotics and Automation Conference would become Proc. 1996 Robotics and Automation Conf.

When the word below appears in the conference publication title,	abbreviate to:	When the word below appears in the conference publication title,	abbreviate to:
Annals	Ann.	Proceedings	Proc.
Annual	Annu.	Record	Rec.
Colloquium	Colloq.	Symposium	Symp.
Conference	Conf.	Technical Digest	Tech. Dig.
Congress	Congr.	Technical Paper	Tech. Paper
Convention	Conv.	First	1st
Digest	Dig.	Second	2nd
Exposition	Expo.	Third	3rd
International	Int.	Fourth	4th
National	Nat.	nth	nth

For electronic conference article when there are no page numbers:

[1] A. B. Lastname, “Title of Article,” in [Title of Conf. Record as it appears on the copyright page], [copyright year] © [IEEE or applicable copyright holder of the Conference Record]. doi: [DOI number]

For an unpublished paper presented at a conference:

[1] A. B. Lastname, “Title of paper,” presented at the Unabbrev. Name of Conf., City of Conf., Abbrev. State, year.

Patents

[#] A. B. Lastname, “Title of patent,” U.S. Patent x xxx xxx, Abbrev. Month day, year.

Example

[1] F. Boegelund, “Method for translating slide presentations into different languages,” U.S. Patent 7,398,214 B2, Jul. 2, 2008.

[2] S. M. Stebbings, “Cheese-Filter Cigarette,” U.S. Patent 3,234,948, Feb. 15, 1966.

[3] J. St-Germain, “Levitationarium for Air Flotation of Humans,” U.S. Patent 4,457,509, Jul. 3, 1984.

[4] P. A. Barnes, “Animal Powered Drive Means,” G.B. Patent 2060081 (A), Apr. 29, 1981.

[5] J. D. Barnes, “Animal Ear Protectors,” U.S. Patent 4233942, Nov. 18, 1980.

[6] J. Blondeau, “Armor with Rollers,” U.S. Patent 5,926,857, Jul. 27, 1999.

Theses (M.S.) and Dissertations (Ph.D.)

[#] A. B. Lastname, "Title of thesis," M.S. thesis, Abbrev. Dept., Abbrev. Univ., City of Univ., Abbrev. State, year.

[#] A. B. Lastname, "Title of dissertation," Ph.D. dissertation, Abbrev. Dept., Abbrev. Univ., City of Univ., Abbrev. State, year.

Note

- The state abbreviation is omitted if the name of the university includes the state name, i.e., "Univ. California, Berkeley."

Examples

[1] H.D. Hughes, "Halloysite nanotube coatings for selectin-mediated capture of rare cells from peripheral blood," Ph.D. dissertation, Cornell University, 2016.

[2] N. Kawasaki, "Parametric study of thermal and chemical nonequilibrium nozzle flow," M.S. thesis, Dept. Electron. Eng., Osaka Univ., Osaka, Japan, 1993.

[3] C. Becele, These de doctoral d'etat, Univ. Grenoble, Grenoble, France, 1968.

Standards

Title of Standard, Standard number, date. URL if needed.

Examples

[1] Letter Symbols for Quantities, ANSI Standard Y10.5-1968.

[2] Review and Approval of Nuclear Facility Safety Basis and Safety Design Basis, DOE-STD-1104-2014. Available: <http://energy.gov/ehss/downloads/doe-std-1104-2014>.

Unpublished Source

The following are the two most common types of unpublished references. Use sparingly.

[#] A. B. Lastname, private communication, Abbrev. Month, year.

[#] A. B. Lastname, "Title of paper," unpublished.

Examples

[1] J. Harrison, private communication, May 2015.

[2] V. Gupta, "An approach to graphs of linear forms," unpublished.

[3] A. Brahms, "Representation error for real numbers in binary computer arithmetic," IEEE Computer Group Repository, Paper R-67-85.

Reference Abbreviations

When the word below appears in the reference,	abbreviate to:
Acoustics	Acoust.
Administration	Admin.
Administrative	Administ.
American	Amer.
Analysis	Anal.
Annals	Ann.
Annual	A.
Apparatus	App.
Applications	Applicat.
Applied	Appl.
Association	Assoc.
Automatic	Automat.
Broadcasting	Broadcast.
Communications	Commun.
Computer(s)	Comput.
Congress	Congr.
Convention	Conv.
Correspondence	Corresp.
Cybernetics	Cybern.
Department	Dept.
Development	Develop.
Digest	Dig.
Economic(s)	Econ.
Education	Educ.
Electrical	Elect.
Electronic	Electron.
Engineering	Eng.
Ergonomics	Ergonom.
Evolutionary	Evol.
Foundation	Found.
Geoscience	Geosci.
Graphics	Graph.
Industrial	Ind.
Industry	Ind.
Information	Inform.
Institute	Inst.
Intelligence	Intell.
International	Int.
Journal	J.
Letter(s)	Lett.
Machine	Mach.

Magazine	Mag.
Management	Manage.
Managing	Manag.
Mathematic(s)	Math.
Mathematical	Math.
Mechanical	Mech.
National	Nat.
Newsletter	Newslett.
Nuclear	Nucl.
Occupation	Occupat.
Philosophical	Philosph.
Proceedings	Proc.
Processing	Process.
Production	Prod.
Productivity	Productiv.
Quarterly	Quart.
Record	Rec.
Reliability	Rel.
Report	Rep.
Royal	Roy.
Science	Sci.
Selected	Select.
Society	Soc.
Sociological	Sociol.
Statistics	Stat.
Studies	Stud.
Supplement	Suppl.
Symposium	Symp.
Systems	Syst.
Technical	Tech.
Telecommunication	Telecommun.
Transactions	Trans.
Vehicular	Veh.
Working	Work.