

## Taylor & Francis American Chemical Society (ACS) style

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In-text citations	
Basic citation format	Resources in the reference list should be cited using superscripted digits in square brackets. A bracketed citation should appear after terminal (e.g., periods, commas, closed quotation marks, question marks, exclamation point) and before nonterminal punctuation (e.g., semicolons, colons):  This phenomenon frequently occurs in nature.[3]  This phenomenon frequently occurs in nature.[3]; however, few laypeople understand its significance.
Multiple resources cited	When citing two resources in the same callout, include both digits within the same square brackets and separate them with a comma:  This phenomenon frequently occurs in nature, experts agree. [3,4]

	When citing multiple resources that are not consecutively numbered in the same callout, include all the digits within the same square brackets and separate them with commas:  This phenomenon frequently occurs in nature, experts agree. [3,4,28]  When citing span of three or more resources that are consecutively number in the same callout, include the first and last digits and separate them with an en-dash:
	This phenomenon frequently occurs in nature, experts agree. [3,4,28,29-31]
Citation with a direct quotation	Citations should be positioned outside the quotation mark that closes a passage in the running text that is drawn directly from a resource:
	One should live by the dictum, "Measure what is measurable, and make measurable what is not."[18]
	Longer quotations (over 50 words) should be set off in a "block." Citations appear after any punctuation that ends block quotations, with a space separating the citation from the punctuation:
	make measurable what is not. <sup>[18]</sup>
	The reference associated with the citation should feature the number of the page on which the quote is found.
Author names	The names of authors associated with a resource can be included in the running text along with a numerical citation. A numerical citation, though, should not be used as a substitute for author names.
	Correct Wayne and Hartley <sup>[12]</sup> write
	Incorrect [12] write.
	The citation should immediately follow the mention of the author name(s).

	The basic formats for citations with different numbers of authors are as follows:
	One author: Smith <sup>[12]</sup>
	Two authors: Smith and Jones <sup>[13]</sup>
	Three or more authors: Smith et al.[14]
Tables and figures	Resources cited in tables or figure legends should follow the standard format and must be included in the reference list.
Reference list	
Order	The references should be numbered consecutively based on the order of their first citation in the text. The first reference cited is "[1]," the second "[2]," and so on, in sequence. The digits should be placed in square brackets. References should not be repeated in the list. The same resource, in other words, should not be given a different number with each subsequent mention in the text but should be cited on these later instances using the number assigned to it in the reference list at its first citation.
	<u>Example</u>
	This is the first citation of Green. <sup>[23]</sup> This is an intervening citation by a different author. <sup>[24]</sup> This is a subsequent citation of the same reference by Green. <sup>[23]</sup>
	References
	[23] Green, M. L. Journal Article.
	[24] Blue, K. W.; Red, J. R. Book Title.

## Multiple references

A reference can combine multiple publications by the same set of authors. Each publication should be separated by a period and a letter-designator in parentheses. Only the first reference should include an author listing

## **Format**

[#] (a) Author, A.; Author, B.; First Reference. (b) Second Reference; (c) Third Reference.

## **Example**

[16] (a) Schrock, R. R. Alkylidene Complexes of Niobium and Tantalum. *Acc. Chem. Res.*, **1979**, *12*, 98–104. (b) On the Trail of Metathesis Catalysts. *J. Organomet. Chem.*, **1986**, *300*, 249–262.

This method of reference combination should only be used when one intends to cite all the resources together on every occasion. If one wishes to cite any of the resources separately from the others, it would be better to include each resource as a separate, uniquely numbered reference entry.

## Form of author name

For all authors, use initials, with periods and spaces between them, in lieu of expanded given and middle names. Include the authors' surnames in full. The listing for each author should be in inverted-order surname-first format. Semicolons should separate individual author names. The word "and" should not precede the final author name for reference entries with ten or fewer authors. If more than ten individuals authored a resource, the reference entry documenting the resource should list the first ten authors followed by "et al."

## Up to 10 Authors

Format: [#] Author, A. Z.; Author, B. Y.; Author, C. X.

## More than 10 Authors

<u>Format:</u> [#] Author, A. Z.; Author, B. Y.; Author, C. X.; Author, D. W.; Author, E. V.; Author, F. U.; Author, G. T.; Author, H. S.; Author, I. R.; Author, J. Q.; et al.

	If an organization is the author of a resource, the full name of the organization can appear in the reference:
	[8] British Standards Institution.
	***
	If a resource has no author, the reference entry should begin with the title of work:
	[12] Authorless Book Title.
Titles	The titles of book chapters, journal articles, reports, and papers should appear in Roman font with headline style capitalization (i.e., capitalize first words of title and subtitle, as well as all nouns, pronouns, verbs, adjectives, and adverbs, regardless of length). The titles of books and journals should appear in italics with headline style capitalization. The titles of journals, moreover, should be abbreviated in accordance with Chemical Abstracts Service Source Index (CASSI) standards.
Place of publication and publisher name for books and reports	Any initial "the" and concluding "Inc.", "Ltd", "Co.", "Publishing Co.", etc. should be omitted from the publisher name in the reference entry.  Where two cities are given as a book or report's place of publication, include the first one only in the book reference. If the city could be confused with another, add the abbreviation of the state, province, or country:  Harvard University Press: Cambridge, MA Cambridge University Press: Cambridge, UK Macmillan: New York Prentice Hall: Englewood Cliffs, NJ Smithsonian Institution Press: Washington, DC  When the publisher's name includes the state name, the state abbreviation is not needed:  University of North Carolina Press: Chapel Hill
	University of North Carolina Press: Chapel Hill

Publication year and volume number (journal articles)	In journal article references, the publication years should be set in boldface, and the volume number should be set in italics.
Issue numbers and DOIs for journals	The issue number can be omitted if the journal is paginated consecutively through the volume (or if month or season is included), but it is not incorrect to include it.
	DOIs are standard elements of journal reference entries. Authors, though, are not required to retrieve DOIs for references.
In press	"In press" should be used in lieu of a publication year for any in-press references.
Pagination	With page ranges, include all digits, even if the end page number repeats the thousand and/or hundred digit(s) found in the first page number. Insert "pp" before the page range of a book chapter citation.
	Nguyen, F. M.; Anh, L. N. Title of Journal Article. <i>Jrnl. Abbr.</i> <b>2012</b> , 1, 1137–178.
	Valesco, B. Title of Book Chapter. In <i>Book Title</i> ; Ricardo, J. A., Ed. Publisher: City; pp 623–654.
	Insert "pp" before the page range of a book chapter citation when citing the chapter full, and insert "p" before the number if only citing a single page.  ***
	If an online journal employs e-location or a similar identification system in lieu of pagination, the journal's method should be retained for the reference entry.

Book	
Book model	Format [#] Author, A.; Author, B.; Author, C. <i>Title of the Book</i> ; Publisher Name: City, State Abbr./Country [optional], yyyy.
	Example (full work citation) [2] Duke, J. A. Handbook of Phytochemical Constituents of GRAS Herbs and Other Economic Plants; CRC Press: Boca Raton, FL, 2001.
	Example (page citation) [2] Duke, J. A. Handbook of Phytochemical Constituents of GRAS Herbs and Other Economic Plants; CRC Press: Boca Raton, FL, 2001; p 52.
Book with titled volume of multivolume work and edition model	Format [#] Author, A.; Author, B.; Author, C. <i>Title of the Multivolume Work</i> , # ed.; Publisher Name: City, State Abbr./Country [optional], ####; Vol. #.  Example (full work citation) [18] Finar, I. L. <i>Organic Chemistry</i> , 3rd.; Longmans,
	Green: London, 1964; Vol. 2.  Example (page citation)  [18] Finar, I. L. Organic Chemistry, 3rd.; Longmans, Green: London, 1964; Vol. 2. p 122.

	T
Book with translator model	Format [#] Author, A.; Author, B.; Author, C. <i>Title of the Book</i> ; Publisher Name: City, State Abbr./Country [optional], ####; translated by A. Translator and B. Translator.
	Example (full citation) [3] Pasteur, L. Studies on Fermentation: The Diseases of Beer, Their Causes, and the Means of Preventing Them; Macmillan: London, 1879; translated by F. Faulkner and D. C. Robb.
	Example (page citation) [3] Pasteur, L. Studies on Fermentation: The Diseases of Beer, Their Causes, and the Means of Preventing Them; Macmillan: London, 1879; p 140; translated by F. Faulkner and D. C. Robb.
Book with non- English title model	Format [#] Author, A.; Author, B.; Author, C.; Author, D. Book Title in Original Language. Publisher Name: City, State Abbr./Country [optional], yyyy.
	Example (full citation) [6] Hupfer, P. Unsere Umwelt: Das Klima—Globale und lokale Aspekte; Teubner Verlag: Stuttgart, Germany, 1996.
	Example (page citation) [6] Hupfer, P. Unsere Umwelt: Das Klima—Globale und lokale Aspekte; Teubner Verlag: Stuttgart, Germany, 1996; p 239.
Edited book, cited in full, model	Format [#] Title of the Book; Editor, A., Editor, B., Editor, C., Editor, D., Ed(s). Publisher Name: City, State Abbr./Country [optional], yyyy.
	Example [47] Fennema's Food Chemistry; Damodaran, S., Parkin, K. L., Eds. Boca Raton, FL: CRC Press, 2017.

## Chapter in edited book with edition model

## Format

[#] Author, A.; Author, B.; Author, C. Title of the Article. In *Title of the Book*, # ed.; Editor, A., Editor, B., Editor, C., Ed(s).; Publisher Name: City, State Abbr./Country [optional], yyyy; pp ###-###.

## Example (full work citation)

[17] Mucha, J. A.; Hess, D. W.; Aydil, E. S. Plasma Etching. In *Introduction to Microlithography*, 2nd ed.: Thompson, L. F., Wilson, C. G., Bowden, M. J., Eds. American Chemical Society: Washington, D.C., 1994; pp 377-510.

## Example (page citation)

[17] Mucha, J. A.; Hess, D. W.; Aydil, E. S. Plasma Etching. In Introduction to Microlithography, 2nd ed.; Thompson, L. F., Wilson, C. G., Bowden, M. J., Eds. American Chemical Society: Washington, D.C., 1994; pp 392.

## Chapter in edited | Format and edition model

book with volume [#] Author, A.; Author, B.; Author, C. Title of the Article. In *Title of the Book*; Editor, A., Editor, B., Editor, C., Ed(s).; Publisher Name: City, State Abbr./Country [optional], yyyy; Vol. #, pp ###-###.

## Example (full work citation)

[13] Teder, A. Kinetics of Chemical Pulping and Adaptation to Modified Processes. In Pulp Chemistry and Technology; Ek, M., Gellerstedt, G., Henriksson, G., Eds.; Walter de Gruyter: Berlin, 2009; Vol. 2, pp 149-164.

## Example (page citation)

[13] Teder, A. Kinetics of Chemical Pulping and Adaptation to Modified Processes. In Pulp Chemistry and Technology; Ek, M., Gellerstedt, G., Henriksson, G., Eds.; Walter de Gruyter: Berlin, 2009; Vol. 2, p 152.

Chapter in edited book with translator model	Format [#] Author, A.; Author, B.; Author, C. Title of the Article. In <i>Title of the Book</i> ; Editor, A., Editor, B., Editor, C., Ed(s).; Publisher Name: City, State Abbr./Country [optional], yyyy; pp ###-##; translated by A. Translator and B. Translator.
	Example (full citation) [63] Mendeleev, D. I. On the Periodic Regularity of the Chemical Elements. In <i>Mendeleev on the Periodic Law: selected Writings, 1869–1905</i> ; Jensen, W. B., Ed.; Dover: Mineola, NY, 2002; pp 38–109; translated by F. Wrenden.
	Example (page citation) [63] Mendeleev, D. I. On the Periodic Regularity of the Chemical Elements. In <i>Mendeleev on the Periodic Law:</i> selected Writings, 1869–1905; Jensen, W. B., Ed.; Dover: Mineola, NY, 2002; pp 85–86; translated by F. Wrenden.
Journal	
Journal article model	Format [#] Author, A.; Author, B.; Author, C. Title of the Article.  Abbr. Jrnl. Title yyyy, ##, ####-###. DOI: #########.
	Example [12] Xie, RF.; Yang, BR.; Cheng, PP.; Wu, S.; Li, ZC.; Tang, JY.;Li, S.; Tang, N.; Lee, S. M. Y; Wang, YH.; et al. Study on the HPLC Chromatograms and Pro-Angiogenesis Activities of the Flowers of <i>Panax notoginseng</i> . <i>J. Liq. Chromatogr. Relat. Technol.</i> <b>2015</b> , 38, 1286–1295. DOI: 10.1080/10826076.2015.1037451.

Journal article with non-English title and e-location model  In-press journal article model	[#] Author, A.; Author, B.; Author, C. Title of the Article. Abbr. Jrnl. Title [Online early access].DOI: ##########. Published Online: Mo dd, yy [optional].  Example [8] Elkhaldy, A. A. S.; Gaikwad, D.; Staples, R. J.; Janen, A.; Boni, Y. Synthesis, Spectral Characterization and Antibacterial Activity of O, O'-dialkyl and Alkylene dithiophosphatogold (III)dichloride; Crystal Structure of [S2POCMe2CMe2O]AuCl2. Phosphorus, Sulfur Silicon Relat. Elem. [Online early access]. DOI: 10.1080/10426507.2018.1521405. Published Online: Oct 31, 2018.  Format [#] Author, A.; Author, B.; Author, C. Title of the Article in Original Language. Abbr. Jrnl. Title yyyy, ##, ###-###-####. DOI: ####################################
	Example [10] Oulkar, D.; Shinde, R.; Khan, Z.; Banerjee, K. High Throughput Residue Analysis of Paraquat and Diquat Involving Hydrophilic Interaction Liquid Chromatographic Separation and Mass Spectrometric Determination. Food Addit. Contam., Part A., in press.
Conference	

# Serial proceedings model

### Format

[#] Author, A.; Author, B.; Author, C. Title of the Paper/Presentation. *Abbr. Ser. Proc./Jrnl. Title* **yyyy**, ##, ####-###. DOI: ####### [optional].

## **Example**

[1] Svit, K.; Protasov, D.; Teys, S.; Sveshnikova, L.; Maksim, Y.; Zhuravlev, K. 2016. Peculiarities of CdS Nanocrystal Formation at Annealing of a Langmuir-Blodgett Matrix. *Phys. Status Solidi C* **2016**, *13*:417–420. doi: 10.1002/pssc.201510285.

# Non-serial proceedings model

## **Format**

[#] Author, A.; Author, B.; Author, C.; Author, D. Title of Paper/Presentation. In *Title of the Collected* Work, Proceedings of the Name of Conference, Conference City, Abbr./Country [optional], Conference Mo dd-dd, yyyy; Editor, A.; Editor, B., Ed(s). Publisher Name: City, State Abbr./Country [optional]: yyyy.

## Example (full citation)

[61] Mazzone, A.; Spagno, C.; Kunz, A. The HoverMesh: A Deformable Structure Based on Vacuum Cells. In *ACE '04,* Proceedings of the 2004 ACM SIGCHI International Conference on Advances in Computer Entertainment Technology, Singapore, June 3–4, 2004; Nakatsu, R., Billinghurst, M., Yu, G., Eds.; ACM Press: New York, 2004.

### Example (page citation)

[61] Mazzone, A.; Spagno, C.; Kunz, A. The HoverMesh: A Deformable Structure Based on Vacuum Cells. In *ACE '04*, Proceedings of the 2004 ACM SIGCHI International Conference on Advances in Computer Entertainment Technology, Singapore, June 3–4, 2004; Nakatsu, R., Billinghurst, M., Yu, G., Eds.; ACM Press: New York, 2004; p 18.

Paper presentation model	Format [#] Author, A.; Author, B.; Author C. Title of Presentation. Presented at Conference Name, Conference City, State Abbr./Country [optional], Mo dd-dd, yyyy; Paper ### [optional].  Example [32] Beltran, J.; Aguilera-Mendoza, L.; Brizuela, C. Feature Weighting for Antimicrobial Peptides Classification: A Multi-objective Evolutionary Approach. Presented at the 2017 IEEE International Conference on
Poster model	Bioinformatics and Biomedicine, Kansas City, MO, Nov 13–16, 2017; Paper B469.  Format
	[#] Author, A.; Author, B.; Author, C. Title of Poster. Presented at Conference Name, Conference City, State Abbr./Country [optional], Mo dd-dd, yyyy; Poster ### [optional].
	Example [33] Shrestha, M.; Bhattarai, B.; Pusey, M.; Aygun, R. Schema Matching and Data Integration on Protein Crystallization Screens. Presented at the 2017 IEEE International Conference on Bioinformatics and Biomedicine, Kansas City, MO, Nov 13–16, 2017; Poster P246.
Thesis	
Thesis model	Format  [#] Author, A. Title of the Dissertation. Dissertation or Thesis Type, Institution Name, City, State Abbr./Country, yyyy.
	Example [26] Allison, N. Bacterial Degradation of Halogenated Aliphatic Acids. Ph.D. Dissertation, Trent Polytechnic, Nottingham, U.K., 1981.
Internet	

Webpage model	Format [#] Author, A.; Author, B.; Author, C. Online Site or Webpage Title. http://XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
Electronic mailing list	Format [#] Mailing List Name, e-mail (accessed Mo dd, yyyy).  Example [6] OCE Informational Listserv, OCENEWSLETTER@listserv.nsf.gov (accessed Dec 1, 2015).
Blog	Format [#] Blogger, A. Name of Blogpost. http://XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
Newspaper or magazine	
Print publication model	Format [#] Author, A.; Author, B.; Author, C. Title of Article. Name of Newspaper, Mo dd, yyyy, pp ##-##.  Example [34] Klein, J. The Application Game: Alan Turing's Insights Just Keep on Giving. New York Times, May 15, 2018, p D2.

Online publication model	Format [#] Author, A.; Author, B.; Author, C. Title of Article.  Name of Newspaper, Mo dd, yyyy. http://XXXXXX.XXX https://XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
Report	
Print model	Format [#] Author, A.; Author, B.; Author, C. Title of Report or Paper; #####; Publisher Name: City, State Abbr./Country [optional], yyyy.  Example (full citation) [45] IARC Working Group on the Evaluation of Carcinogenic Risk to Humans. Re-evaluation of Some Organic Chemicals, Hydrazine and Hydrogen Peroxide; IARC Monographs 71; International Agency for Research on Cancer: Lyon, France, 1999.  Example (page citation) [45] IARC Working Group on the Evaluation of Carcinogenic Risk to Humans. Re-evaluation of Some Organic Chemicals, Hydrazine and Hydrogen Peroxide; IARC Monographs 71; International Agency for Research on Cancer: Lyon, France, 1999; p 532.

Online model	Format [#] Author, A.; Author, B.; Author, C. Title of Report or Paper; ####; Publisher Name: City, State Abbr./Country [optional], yyyy. http://XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
Personal communication	
Personal Letter, telephone conversation, or e-mail	Format [#] Contact, A. Affiliation, City, State Abbr./Country [optional]. Personal communication, yyyy.  Example [19] Swanson, K. Tulane University, New Orleans. Personal communication, 2004.
Other reference types	
Patent model	Format [#] Inventor, A.; Inventor, B.; Inventor, C. Title of Patent. Patent Code ########, Mo dd, yyyy.  Example [67] Pfeifer, A.; Muhs, A.; Pihlgren, M.; Adolfsson, O.; Van Leuven, F. Humanized Tau Antibody. U.S. Patent 9,657,091, May 23, 2017.

Computer software with developer model	Format [#] Developer, A.; Developer, B.; Developer, C. Title of Program, version #.#; description; Producer Name: City, State Abbr./Country [optional], ####.
	Example [10] Noguera, J.; Cumby, C. <i>SigmaXL</i> , version 8.0; plugin for Microsoft Excel; SigmaXL, Inc: Kitchener, 2017.
Computer software without developer model	Format [#] Title of Program, version #.#; description; Producer Name: City, State Abbr./Country [optional], ####.
	Example [76] SPSS Amos, version 22.0; SEM software; IBM: Armonk, 2013.
FORCE11- compliant software with producer location model	Format [#] Developer, A. A.; Developer; B. B.; Developer, C. C. Title of the Software: Subtitle, version #.#; Producer Name Archive Name: City, ST Country, yyyy. https://URL (accessed Mon dd, yyyy).
	<u>Example</u>
	[3] Hecht, K.; McKinnon, R.; Podkowiak, T.; Roman, M.; Schmidt, J.; Vivier, S.; Werst, E.; Wyman, J. <i>Spectrum</i> , version 6.06; Avenir Health: Glastonbury, CT, 2021. https://avenirhealth.org/Download/Spectrum/SpecInstall.EX E (accessed Feb 26, 2021).
FORCE11-	<u>Format</u>
compliant software model without producer location (archive) model	[#] Developer, A. A.; Developer; B. B.; Developer, C. C. <i>Title of the Software: Subtitle</i> , version #.#; Producer Name Archive Name, yyyy. https://URL (accessed Mon dd, yyyy).
	<u>Example</u>
	[22] Short, W. M. <i>MultiWordNet</i> , version 0.1.3; Python Package Index, 2020. https://pypi.org/project/multiwordnet/0.1.3/#files (accessed Feb 26, 2021).

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