Software tools for handling references

Referencing tools

- a piece of software or an online tool that allows you to store and format references
- supports researchers in performing three basic research steps: searching, storing, and writing
- handy to organize and format references so can be easily incorporate them in your essays, research papers, dissertations and PhD thesis
- named also referencing software, referencing tool, reference management software, citation software, citation app, paper software, citation manager, research paper management tool, bibliography software, literature review software, literature management software, research paper organizer …

Basic features

- Import citations from bibliographic databases and websites
- Gather metadata from PDF files
- Allow organization of citations within the reference manager database
- Allow annotation of citations
- Allow sharing of the reference manager database or portions thereof with colleagues
- Allow data interchange with other reference manager products through standard metadata formats (e.g. RIS, BibTeX)
- Produce formatted citations in a variety of styles
- Work with word processing software to facilitate in-text citation

Digital Object Identifier (DOIs)

- issued by CrossRef for journals, proceedings or book chapters.
- issued by DataCite for datasets.
- other unique identifiers than DOI for scholarly content, e.g. the PubMed ID, PubMed Central ID, or the ArXiV ID.
- reference managers are using these identifiers to handle bibliographic information:
  - can extract the DOI from imported PDFs,
  - obtain more citation information using the DOI,
  - store the DOI internally to help find duplicate records, etc.

Using DOI

- authors only need to worry about the DOI (or other unique identifier), all the other information they need (authors, title, journal, link to the full-text) can be obtained from it
- Look for examples: http://doi.org/[DOInumber]

Standardized bibliographic data formats

- **BibTeX** used in combination with the typesetting system LaTeX; works with Microsoft Word and other authoring tools, and by online bibliographic databases such as Google Scholar.
- **RIS** (Research Information Systems) is standardized tag format; widely supported and includes a field for digital object identifiers (DOIs).
- **Endnote XML** and **Citeproc JSON** are newer formats; data exchange formats on Web, easier to process automatically (compared with the plain text of BibTex or RIS)

Types of in-text citation

- **Numeric citation:** number each of the sources in the reference list and use the correct number when cite a source.
- **Parenthetical citation:** put the source reference in parentheses directly in the text; usually includes the author's last name along with the publication date and/or the page number.
- **Note citation:** put the source reference in a footnote or endnote.

Citation style

Citation style	Disciplines	Type of citation
MLA	Humanities	Parenthetical (author-page number)
APA	Psychology, education, social sciences	Parenthetical (author-date)
Chicago A	History, humanities	Notes
Chicago B	Sciences, social sciences, humanities	Parenthetical (author-date)
Turabian	Humanities, social sciences, sciences	Notes or author-date
Harvard	Economics	Parenthetical (author-date)
Vancouver	Medicine	Numeric
OSCOLA	Law	Notes
IEEE	**Engineering, IT**	**Numeric**
AMA	Medicine	Numeric
ACS	Chemistry	Numeric, Author-page number or Notes
NLM	Medicine	Numeric
AAA	Anthropology, social studies	Numeric
APSA	Political science	Parenthetical (author-date)

IEEE Citation Example

- In text-citation:

  Scientific workflows on Clouds are discussed for the first time in details in [1] … RDF Data Management on Cloud was recently discussed in [2] … revolution in information technology [3]…

- Reference list entry:

  [1] M. A. Rodriguez and R. Buyya, "Deadline Based Resource Provisioning and Scheduling Algorithm for Scientific Workflows on Clouds," in *IEEE Transactions on Cloud Computing*, vol. 2, no. 2, pp. 222-235, 1 April-June 2014.

  [2] Zoi Kaoudi; Ioana Manolescu; Stamatis Zampetakis, *Cloud-Based RDF Data Management* , Morgan & Claypool, 2020

  [3] R. Buyya, "Cloud computing: The next revolution in information technology," 2010 First International Conference On Parallel, Distributed and Grid Computing (PDGC 2010), Solan, 2010, pp. 2-3..

Most used tools

Free

- Zotero
- Mendeley
- JabRef
- Docear
- PaperPile
- CiteULike

With license

- EndNote
- RefWorks
- Citavi
- Papers

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A comparison