



# RefWorks

## RefWorks 2.0 and LaTeX

Version 1/2016

**RefWorks** is a web based software which allows you to import, save and organize bibliographic references from databases, books, journal, web pages and other sources. It also helps you add citations to your document and automatically format your bibliography.

**LaTeX** is a document preparation system and document markup language. It uses commands and packages written on a source .tex file which, once compiled, will usually produce a PDF document.

Example of an input LaTeX file:

```
\documentclass[12pt]{article}
\usepackage{amsmath}
\title{\LaTeX}
\date{}
\begin{document}
  \maketitle
  \LaTeX{} is a document preparation system for the \TeX{}
  typesetting program. It offers programmable desktop publishing
  features and extensive facilities for automating most aspects of
  typesetting and desktop publishing, including numbering and
  cross-referencing, tables and figures, page layout, bibliographies,
  and much more. \LaTeX{} was originally written in 1984 by Leslie
  Lamport and has become the dominant method for using \TeX; few
  people write in plain \TeX{} anymore. The current version is
  \LaTeXe.

  § This is a comment; it will not be shown in the final output.
  § The following shows a little of the typesetting power of LaTeX:
  \begin{align}
    E &= mc^2 && \\\
    m &= \frac{m_0}{\sqrt{1-\frac{v^2}{c^2}}}
  \end{align}
\end{document}
```

Once run, the output file will appear as follows:

# L<sup>A</sup>T<sub>E</sub>X

L<sup>A</sup>T<sub>E</sub>X is a document preparation system for the T<sub>E</sub>X typesetting program. It offers programmable desktop publishing features and extensive facilities for automating most aspects of typesetting and desktop publishing, including numbering and cross-referencing, tables and figures, page layout, bibliographies, and much more. L<sup>A</sup>T<sub>E</sub>X was originally written in 1984 by Leslie Lamport and has become the dominant method for using T<sub>E</sub>X; few people write in plain T<sub>E</sub>X anymore. The current version is L<sup>A</sup>T<sub>E</sub>X 2<sub>ε</sub>.

$$E_0 = mc^2 \tag{1}$$

$$E = \frac{mc^2}{\sqrt{1 - \frac{v^2}{c^2}}} \tag{2}$$

**BibTeX** is a reference management software for formatting lists of references. Each reference is included in a text file and described by some fields, such as author, title, publisher, and can be referred to, in the source file, through specific commands (typically `\cite{ReferenceName}`). BibTeX does not contain instructions regarding the bibliography style to use in your document.

Example of a BibTeX bibliographic reference:

```
@Book{abramowitz+stegun,  
  author = "Milton Abramowitz and Irene A. Stegun",  
  title = "Handbook of Mathematical Functions with  
          Formulas, Graphs, and Mathematical Tables",  
  publisher = "Dover",  
  year = 1964,  
  address = "New York",  
  edition = "ninth Dover printing, tenth GPO printing"  
}
```

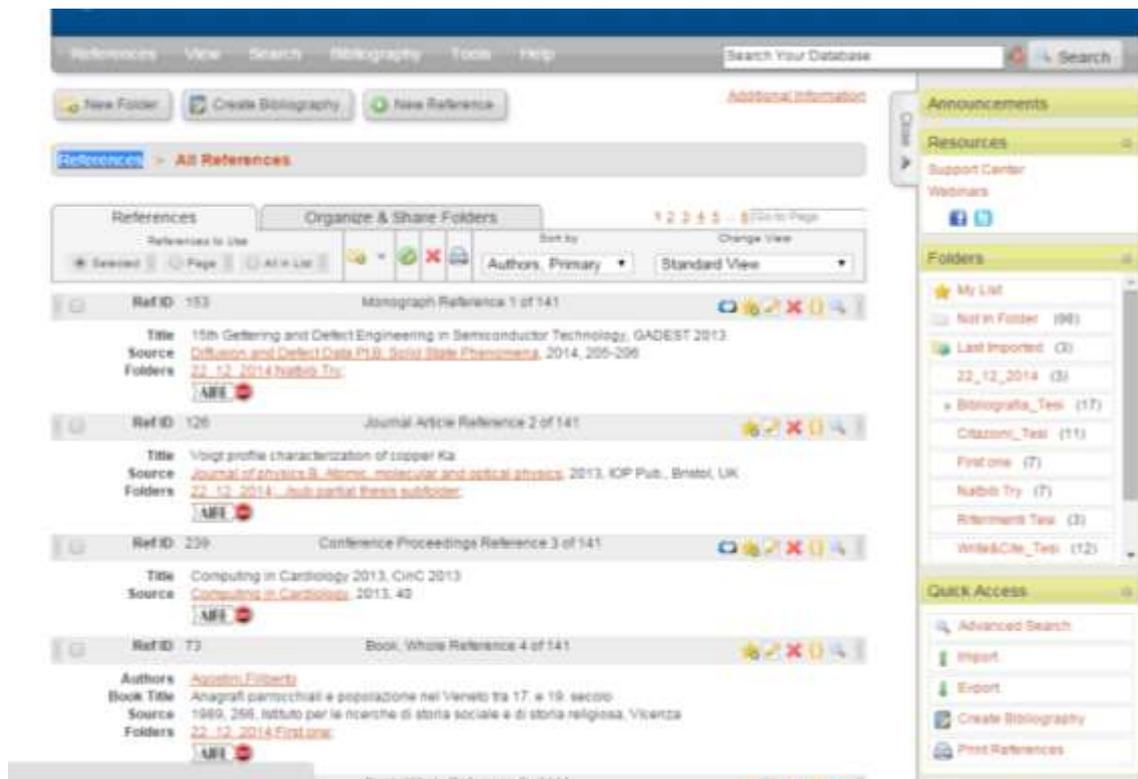
## How to export references from Refworks to LaTeX

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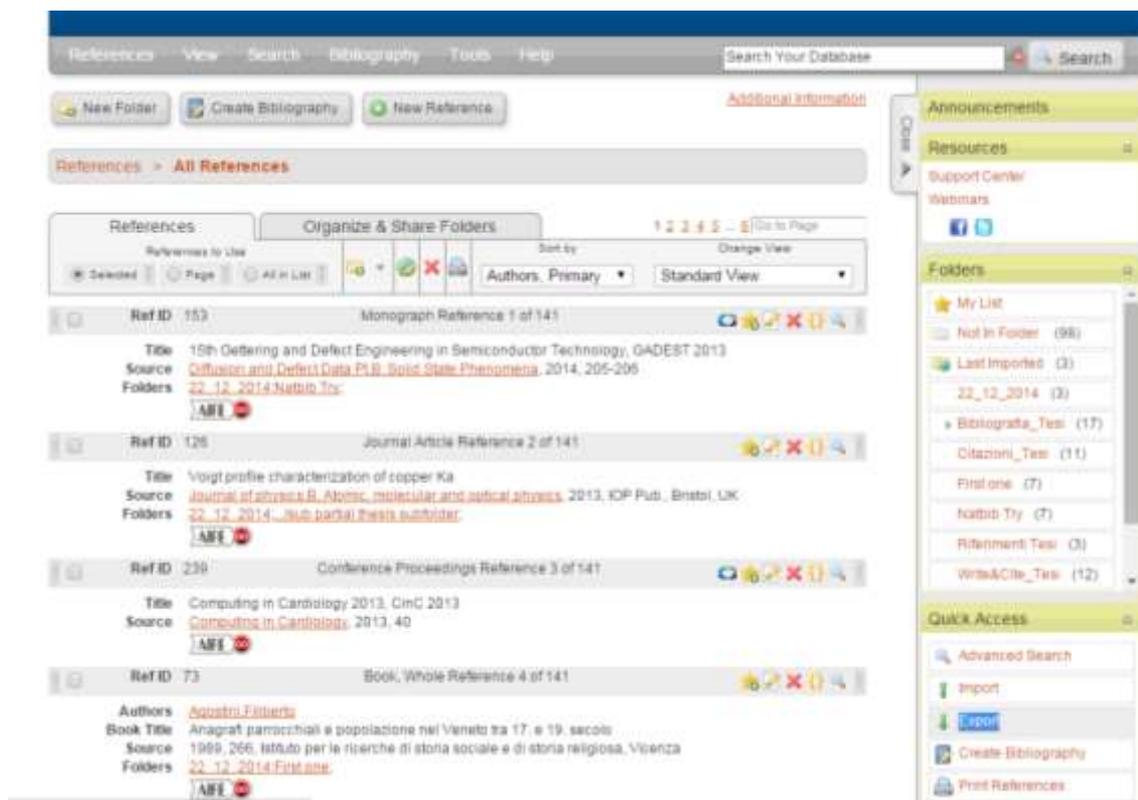
You should first export your citations in a BibTeX format and save them correctly.

Follow the steps:

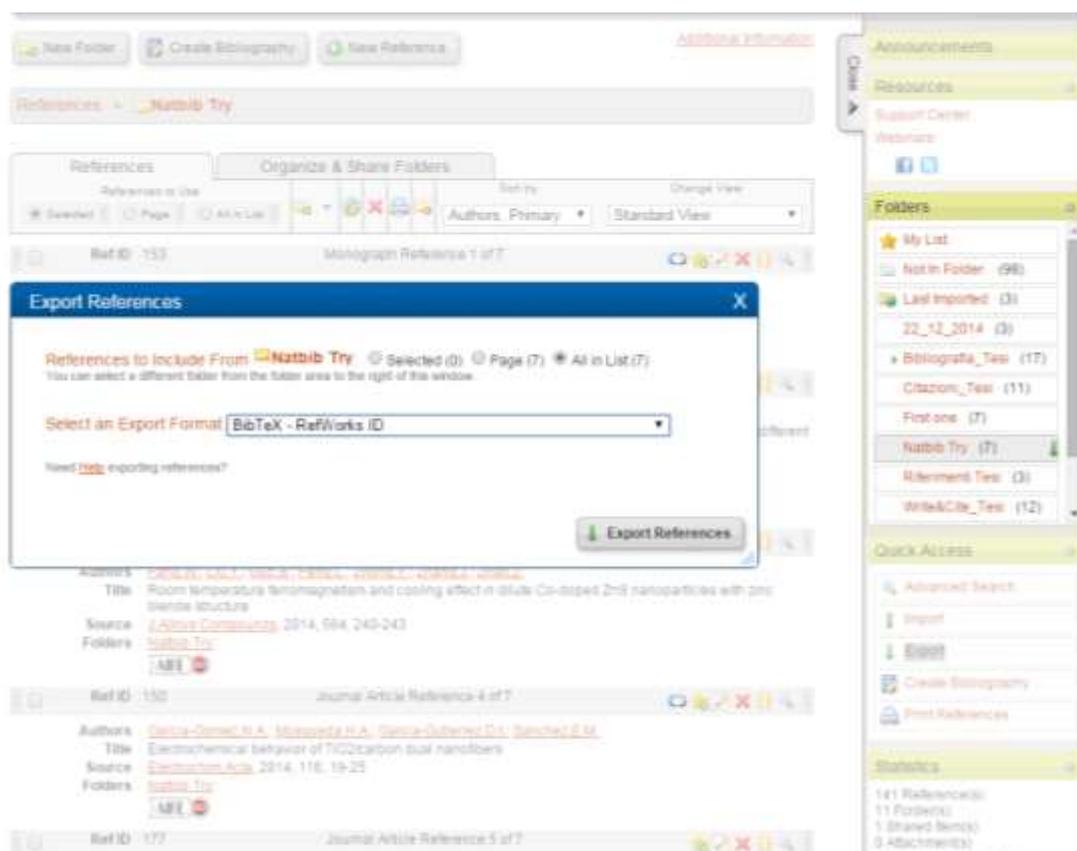
1. Log in to RefWorks;
2. Select the folder containing your references from the right sidebar. You can also select *All your references* from *View* in the main menu;



3. From the *Quick Access* menu, click *Export*;



- From *Select an Export Format*, choose **BibTeX-RefWorks ID** and then click on *Export References*;



5. A new tab will appear with your references in BibTeX format. In the *File* menu, click on *Save page as*. Select as destination folder the same folder containing your LaTeX file;

```
@book{Refworks:153,
  year={2014},
  title={15th Gettering and Defect Engineering in Semiconductor Technology, GADEST 2013},
  series={Diffusion and Defect Data Pt.B: Solid State Phenomena},
  volume={205-206}
}

@article{Refworks:152,
  author={Y. Ao and Y. Gao and P. Hang and C. Wang and J. Hou and J. Qian},
  year={2014},
  title={Solvent-controlled preparation and photocatalytic properties of nanostructured TiO2 thin films with different morphologies},
  journal={Materials Research Bulletin},
  volume={49},
  number={1},
  pages={223-228}
}

@article{Refworks:154,
  author={X. Fang and Y. Liu and B. Guo and L. Peng and Y. Zhong and J. Zhang and Z. Zhao},
  year={2014},
  title={Room temperature ferromagnetism and cooling effect in dilute Co-doped ZnS nanoparticles with zinc blende structure},
  journal={Journal of Alloys and Compounds},
  volume={584},
  pages={240-243}
}

@article{Refworks:150,
  author={H. A. Garcia-Gomez and H. A. Pasquada and D. I. Garcia-Gutierrez and E. M. Sanchez},
  year={2014},
  title={Electrochemical behavior of TiO2/carbon dual nanofibers},
  journal={Electrochimica Acta},
  volume={116},
  pages={19-25},
  notes={Article in Press}
}

@article{Refworks:177,
  author={B. Kiss and J. Söderlund and G. Niklasson and C. Granqvist},
  year={1999},
  title={The real origin of lognormal size distributions of nanoparticles in vapor growth processes},
  journal={Nanostructured Materials},
  volume={12},
  number={1},
  pages={327-332}
}

@article{Refworks:140,
  author={Y. Huan and Z. Zhang and Y. Gong and Q. Zhang and G. Yan},
```

6. Rename your file *filename.bib*, and then click *Save*. Your BibTeX file has now been saved correctly.

The right order to run LaTeX and BibTeX is:

1. LaTeX document;
2. BibTeX *document*;
3. LaTeX document;
4. LaTeX document.

Where “document” is your LaTeX input file.

This way, you will produce your bibliography and internal citations correctly.

Your bibliography is included in a different .bib file, not in the input .tex file. DO NOT run your .bib file, but your .tex file with BibTeX instead.

You will run your .tex document four times: the first run generates an auxiliary file .aux, which contains information about citations, the bibliographic style and the name of the BibTeX database.

The second run uses the information in the auxiliary file and the data included in the BibTeX database to create a .bbl file.

The third run will insert the bibliography inside the document, but with a wrong numbering.

The fourth will fix the numbering.

## Insert citations in LaTeX

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You can now insert citations directly in your document.

The main commands are:

1. `\bibliographystyle{style}`. You should insert it under the command `\begin{document}`. `style.bst` is the name of the bibliographic style for your bibliography;
2. `\bibliography{filename}` is the LaTeX command you should use every time you need to create your bibliography.  
`filename.bib` is the name of the file with the references just imported from RefWorks;
3. `\cite{RefWorks:#}` where “#” is the RefWorks citation ID number. You should insert this command every time you need to insert a reference.

Your bibliography will be formatted in the bibliography style you specify in the `\bibliographystyle{style}` command.

You can set different bibliographic styles. The most common styles are the following:

- plain: entries in alphabetical order labeled with numbers;
- unsrt: like plain, but the references are in the order they appear, not alphabetical;
- alpha: like plain, but the references are labeled by the author name and year of publication;
- abbrv: like plain, but the entries are more compact because first names, month and journal names are abbreviated.

You can also modify your style in two different ways:

- Natbib: with the natbib package you can insert author-year citations. For a detailed guide, please check the link <https://www.ctan.org/pkg/natbib>)
- Biblatex: Biblatex is a complete reimplement of the bibliographic facilities provided by LaTeX in conjunction with BibTeX. It redesigns the way in which LaTeX interacts with BibTeX at a fairly fundamental level. With biblatex, BibTeX is only used (if it is used at all) to sort the bibliography and to generate

labels. Formatting of the bibliography is entirely controlled by TeX macros. More info at the link: <http://www.ctan.org/pkg/biblatex>

## Most common errors

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### "Sorry--you've exceeded BibTeX's buffer size 5000."

BibTeX has a 5000 character limit for each field, which is usually adequate, but for a reference where the "note" field contains a large amount of information such as the entire table of contents, this limit may be exceeded. If this is the case, an error message will show "Sorry--you've exceeded BibTeX's buffer size 5000." In this case, use a text editor to open your bibliography file and shorten the field containing too many characters.

### Special characters used as part of the syntax of LaTeX

If the references in your bibliography file contains special characters used as part of the syntax of LaTeX, you might see a whole host of errors when you run LaTeX on your document after running BibTeX. For example, LaTeX will view any ampersand in a journal title as an alignment character, and you will see an error message saying "Misplaced alignment tab character &." Use a text editor to find the line that is causing the error (which LaTeX should report as part of its error message) and replace the trouble-making character with the following commands:

Character	LaTeX commands
#	\#
\$	\\$
%	\%
&	\&
_	\_
{	\{
}	\}
~	\~{ }
^	\^{ }
\	\backslash\$

### **Error when formatting the author field**

BibTeX reads text in the author field as an author's name or names unless told otherwise. For example, say a reference exported from RefWorks contains the line:

```
author={Institute of Electrical Engineers},
```

BibTeX will read this field as a person's name, where the first name is "Institute" and the last name is "of Electrical Engineers," and would format accordingly. Use a text editor and add quotes around the field so that the line reads:

```
author="{Institute of Electrical Engineers}",
```

Now BibTeX will read all this as one piece rather than as a person's name, and will format correctly.

### **Override BibTeX capitalizing conventions**

BibTeX attempts to correct the capitalization in the title field so that only the first letter of the first word is capitalized. While this is generally grammatically correct, it can cause problems if the title contains a proper name or an anagram, so that a line in the bibliography file that looks like this:

```
title={IEE Proceedings}
```

will appear in the bibliography as "lee proceedings." Use a text editor to add quotes around the field so that the line reads:

```
title="{IEE Proceedings}"
```

The quotes will prevent BibTeX from applying its own capitalization rules to the title of the document and thus will preserve the capitalization for proper nouns.