

# Biblatex Cheat Sheet

For further details, explanations, hints, caveats, examples and alternatives to the backend Biber, see [the Biblatex manual](#). For a list of *contributed* styles and extensions, see [ctan.org/topic/biblatex](#).

## Basic Setup

Compilation sequence: `pdflatex → biber → pdflatex (×2)`.

```
\documentclass[<language option>]{<class>}
...
\usepackage[utf8]{inputenc}
\usepackage{babel,csquotes,xpatch}% recommended
\usepackage[backend=biber,<options>]{biblatex}
\addbibresource[<options>]{<first resource>}
\addbibresource[<options>]{<second resource>}
...
\begin{document}
...
\printbibliography[<options>]
...
\printbibliography[<options>]
...
\end{document}
```

## Common Package Options

<code>style</code>	<code>= &lt;style&gt;</code>	style of bibliography and citations
<code>bibstyle</code>	<code>= &lt;style&gt;</code>	bibliography style
<code>citestyle</code>	<code>= &lt;style&gt;</code>	citation style
<code>refsection</code>	<code>= &lt;division&gt;</code>	new <code>refsection</code> at document division
<code>refsegment</code>	<code>= &lt;division&gt;</code>	new <code>refsegment</code> at document division
<code>autocite</code>	<code>= &lt;style&gt;</code>	behaviour of <code>\autocite</code> etc.
<code>sortcites</code>	<code>= &lt;boolean&gt;</code>	whether to sort multiple citations
<code>maxnames</code>	<code>= &lt;integer&gt;</code>	truncate longer name lists
<code>minnames</code>	<code>= &lt;integer&gt;</code>	no. of names in truncated name lists
<code>backref</code>	<code>= &lt;boolean&gt;</code>	whether to print ‘back references’
<code>mincrossrefs</code>	<code>= &lt;integer&gt;</code>	minimum number of cross references
<code>sorting</code>	<code>= &lt;sort order&gt;</code>	bibliography sort order
<code>indexing</code>	<code>= &lt;boolean&gt;</code>	whether to enable indexing support

## Sources of Bibliographical Data

<code>\addbibresource[&lt;options&gt;]{&lt;resource&gt;}</code>	add to default resource list
<code>\addglobalbib[&lt;options&gt;]{&lt;resource&gt;}</code>	add to global resource list

Options:

<code>location</code>	<code>= local</code>	local file	(default)
	<code>= remote</code>	HTTP/FTP	
<code>datatype</code>	<code>= bibtex</code>	BibTeX	(default)
	<code>= ris</code>	RIS	
	<code>= zoterordfxml</code>	Zotero RDF/XML	
	<code>= endnotexml</code>	EndNote XML	

`<resource>` must be one of:

<code>&lt;filename&gt;.bib</code>	local database
<code>http://.../&lt;filename&gt;.bib</code>	remote
<code>ftp://.../&lt;filename&gt;.bib</code>	remote

`\bibliography{<filename>,<filename>,...}` adds 1+ local BibTeX files.

## Citations

Standard commands:

<code>c,m \cite[&lt;pre&gt;]{&lt;post&gt;}{&lt;key&gt;}</code>	bare
<code>c,m \parencite[&lt;pre&gt;]{&lt;post&gt;}{&lt;key&gt;}</code>	parenthetical
<code>m \footcite[&lt;pre&gt;]{&lt;post&gt;}{&lt;key&gt;}</code>	footnote ( <code>\footnote</code> )
<code>m \footcitetext[&lt;pre&gt;]{&lt;post&gt;}{&lt;key&gt;}</code>	footnote ( <code>\footnotetext</code> )

Common commands:

<code>c,m \textcite[&lt;pre&gt;]{&lt;post&gt;}{&lt;key&gt;}</code>	textual
<code>c,m \smartcite[&lt;pre&gt;]{&lt;post&gt;}{&lt;key&gt;}</code>	context-dependent
<code>a \cite*[&lt;pre&gt;]{&lt;post&gt;}{&lt;key&gt;}</code>	year/title only
<code>a \parencite*[&lt;pre&gt;]{&lt;post&gt;}{&lt;key&gt;}</code>	year/title only
<code>m,n \supercite[&lt;pre&gt;]{&lt;post&gt;}{&lt;key&gt;}</code>	superscript

Style-independent commands:

<code>c,m \autocite[&lt;pre&gt;]{&lt;post&gt;}{&lt;key&gt;}</code>	style-dependent
<code>c,m \autocite*[&lt;pre&gt;]{&lt;post&gt;}{&lt;key&gt;}</code>	style-dependent

Text commands:

<code>c \citeauthor[&lt;pre&gt;]{&lt;post&gt;}{&lt;key&gt;}</code>	author list
<code>c \citeauthor*[&lt;pre&gt;]{&lt;post&gt;}{&lt;key&gt;}</code>	compressed author list
<code>\citetitle[&lt;pre&gt;]{&lt;post&gt;}{&lt;key&gt;}</code>	(short) title
<code>\citetitle*[&lt;pre&gt;]{&lt;post&gt;}{&lt;key&gt;}</code>	(full) title
<code>s \citeyear[&lt;pre&gt;]{&lt;post&gt;}{&lt;key&gt;}</code>	year
<code>s \citedate[&lt;pre&gt;]{&lt;post&gt;}{&lt;key&gt;}</code>	date
<code>\citeurl[&lt;pre&gt;]{&lt;post&gt;}{&lt;key&gt;}</code>	URL

Multi-volume commands:

<code>c,m \volcite[&lt;pre&gt;]{&lt;vol&gt;}{&lt;page&gt;}{&lt;key&gt;}</code>	cite by volume + page
<code>c,m \pvolcite[&lt;pre&gt;]{&lt;vol&gt;}{&lt;page&gt;}{&lt;key&gt;}</code>	parenthetical
<code>c,m \fvolcite[&lt;pre&gt;]{&lt;vol&gt;}{&lt;page&gt;}{&lt;key&gt;}</code>	footnote ( <code>\footnote</code> )
<code>\ftvolcite[&lt;pre&gt;]{&lt;vol&gt;}{&lt;page&gt;}{&lt;key&gt;}</code>	footnote ( <code>\footnotetext</code> )
<code>c,m \svolcite[&lt;pre&gt;]{&lt;vol&gt;}{&lt;page&gt;}{&lt;key&gt;}</code>	context-dependent
<code>c,m \tvolcite[&lt;pre&gt;]{&lt;vol&gt;}{&lt;page&gt;}{&lt;key&gt;}</code>	textual
<code>c,m \avolcite[&lt;pre&gt;]{&lt;vol&gt;}{&lt;page&gt;}{&lt;key&gt;}</code>	style-dependent

Standalone citation commands:

<code>\fullcite[&lt;pre&gt;]{&lt;post&gt;}{&lt;key&gt;}</code>	full reference
<code>\footfullcite[&lt;pre&gt;]{&lt;post&gt;}{&lt;key&gt;}</code>	full reference in footnote

Inclusion in bibliography without citation:

<code>\nocite{&lt;key&gt;}</code>	<code>\nocite{*}</code>	inclusion only
<code>c \notecite[&lt;pre&gt;]{&lt;post&gt;}{&lt;key&gt;}</code>		with notes
<code>c \pnocite[&lt;pre&gt;]{&lt;post&gt;}{&lt;key&gt;}</code>		with parenthetical notes
<code>\fnocite[&lt;pre&gt;]{&lt;post&gt;}{&lt;key&gt;}</code>		with footnote notes

<sup>a</sup> Author-year and author-title styles only.

<sup>c</sup> Capitalised command(s) also provided. e.g. `\Textcite`, `\Autocites`.

<sup>m</sup> ‘Multicite’ command(s) available.

e.g. `\cite(<multipre>)(<multiplist>){<pre>}{<post>}{<key>}{<pre>}{<post>}{<key>}` . . .

<sup>n</sup> Numerical styles only.

<sup>s</sup> Starred version available to include extra year information.

## BibTeX Databases

A BibTeX database file is a plain text file with extension `.bib`. It consists of entries of the following form:

<code>@&lt;entrytype&gt;{&lt;key&gt;,</code>	e.g.	<code>@book{tolkien-hobbit,</code>
<code>&lt;field&gt; = &lt;value&gt;,</code>		<code>author = {Tolkien, J. R. R.},</code>
<code>&lt;field&gt; = &lt;value&gt;,</code>		<code>title = {The Hobbit},</code>
<code>&lt;field&gt; = &lt;value&gt;,</code>		<code>date = {YYYY-MM-DD},</code>
<code>...}</code>		<code>...}</code>

`<entrytype>` partially determines which fields are required and which optional. `<key>` is a unique identifier used in citation commands to reference the entry. `<field>` is the name of a database field and determines the expected format of `<value>`. `<value>` is the value of the relevant `<field>` for the entry.

### BibTeX Database Entry Types

Material from journals, magazines & newspapers:

<code>@article</code>	journal, magazine or newspaper article
<code>@periodical</code>	whole issue of a periodical
<code>@supperperiodical</code>	supplemental material in periodical

Material from single-authored or co-authored books:

<code>@inbook</code>	book part with own title
<code>@suppbook</code>	supplemental material in book
<code>@bookinbook</code>	originally published as standalone book
<code>@book</code>	single-volume book by author(s) of whole
<code>@mvbook</code>	multi-volume book

Material from edited anthologies:

<code>@incollection</code>	contribution to anthology
<code>@suppcollection</code>	supplemental material in anthology
<code>@collection</code>	single-volume edited anthology
<code>@mvcollection</code>	multi-volume collection

Material from conference proceedings:

<code>@inproceedings</code>	article in conference proceedings
<code>@proceedings</code>	single-volume conference proceedings
<code>@mvproceedings</code>	multi-volume conference proceedings

Material from works of reference:

<code>@inreference</code>	article in a reference work
<code>@reference</code>	single-volume work of reference
<code>@mvreference</code>	multi-volume reference work

Material from technical & institutional publications:

<code>@manual</code>	technical or other documentation
<code>@report</code>	institutional report or white paper
<code>@patent</code>	patent or patent request
<code>@thesis</code>	work completed to fulfil degree requirement

Material from online, informal & other sources:

<code>@online</code>	<i>inherently</i> online source
<code>@booklet</code>	informally published book
<code>@unpublished</code>	work not formally published
<code>@misc</code>	last resort (check manual first!)

Special entries for database management:

<code>@set</code>	(static) entry ‘set’
<code>@xdata</code>	data-container (cannot be cited)

BIB <sub>TeX</sub> Database Fields			
INDIVIDUALS	author <sup>s</sup>	author(s) of title, <code>authortype</code> specifies kind	
	bookauthor	author(s) of booktitle	
	editor <sup>s</sup>	editor(s), <code>editortype</code> specifies role	
	editora/b/c	secondary editor(s), <code>editora/b/ctype</code> for roles	
	afterword	author(s) of afterword	
	annotator	author(s) of annotations	
	commentator	author(s) of commentary	
	forward	author(s) of forward	
	introduction	author(s) of introduction	
	translator	translator(s) of (book)title	
ORGS	holder	of patent	
	institution	university or similar	
	organization	manual/website publisher or event sponsor	
	publisher <sup>o</sup>	publisher(s)	
	TITLES	title <sup>a,o,s,u</sup>	title
		indextitle	if different from title
		booktitle <sup>a,u</sup>	title of book
		maintitle <sup>a,u</sup>	title of multi-volume book
		journaltitle <sup>u</sup>	or journal <sup>s</sup>
		issuetitle <sup>u</sup>	title of journal special issue
eventtitle <sup>a</sup>		title of conference or event	
reprinttitle		title of a reprint of the work	
series <sup>s</sup>	publication series		
VOLUMES & VERSIONS	volume	volume of journal or multi-volume book	
	number	numbered issue of journal or book in series	
	part	number of physical part of logical volume	
	issue	non-number issue of journal	
	volumes	number of volumes for multi-volume work	
	edition	as <i>&lt;integer&gt;</i> rather than ordinal	
	version	revision number for software or manual	
	pubstate	publication state	
	PAGES	pages	page list or range
		pagetotal	total number of pages
(book)pagination		pagination format of (book)title	
date <sup>o</sup>		publication date as <i>&lt;YYYY-MM-DD&gt;</i>	
eventdate		conference or event date as <i>&lt;YYYY-MM-DD&gt;</i>	
urldate		access date for url as <i>&lt;YYYY-MM-DD&gt;</i>	
location <sup>o</sup>		or address, where published	
venue		of event	
url		URL	
DIGITAL		doi	Digital Object Identifier
	eid	electronic identifier of <code>@article</code>	
	eprint	archive-specific electronic identifier	
	eprinttype	type of identifier, <code>eprintclass</code> for further details	
	type	of <code>@manual</code> , <code>@patent</code> , <code>@report</code> or <code>@thesis</code>	
	entrysubtype	for finer-grained specification of type	
	addendum	miscellaneous data printed at end of entry	
	note	miscellaneous data printed within entry	
	howpublished	non-standard publication details	
	language <sup>o</sup>	language of work	
MISC. TYPES			

INTERNATIONAL STANDARDS	isan	International Standard Audiovisual Number	
	isbn	International Standard Book Number	
	ismn	International Standard Music Number	
	isrn	International Standard Technical Report Number	
	issn	International Standard Serial Number	
	iswc	International Standard Work Code	
	abstract	record of work's abstract	
	annotation	for annotated bibliographies	
	file	local link	
	library	library name, call number or similar	
LABELS	label	fall-back label	
	shorthand	special designator, overrides label in citations	
	shorthandintro	override default introduction of shorthand	
	<i>Special fields for non-printable data:</i>		
RELATED	execute	arbitrary <code>TeX</code> code	
	keywords	separated list of keywords	
	options	per-entry options	
	ids	citation key aliases	
	related	another entry key, <code>relatedoptions</code> for options	
	relatedtype	relationship identifier for <code>related</code>	
	relatedstring	override value of <code>relatedtype</code>	
	INHERIT DATA	entryset	list of entry keys in <code>@set</code>
		crossref	another entry key
		xref	another entry key
xdata		entry key for <code>@xdata</code> container	
LANG.	langid	<code>babel</code> / <code>polyglossia</code> language identifier	
	langidopts	<code>polyglossia</code> options for <code>langid</code>	
SORTING	gender	gender of author or editor	
	presort	modify sorting	
	sortkey	sort key, overrides everything except <code>presort</code>	
	sortname	replaces author or editor when sorting	
	sortshorthand	sortkey if entry has <code>shorthand</code>	
	sorttitle	replaces title when sorting	
	indexsorttitle	replaces title when sorting index	
sortyear	replaces year (from date) when sorting		

## Built-In Styles

citestyle		bibstyle	
numeric <sup>c,v</sup>		numeric	numeric
alphabetic <sup>v</sup>		alphabetic	alphabetic
authoryear <sup>c,ib,ic</sup>		authoryear	author-year
authortitle <sup>c,ib,ic,t,tc,tic</sup>		authortitle	
verbose <sup>ib,in,n</sup>		verbose	full reference on first citation
verbose-trad1/2/3 <sup>tr</sup>			'traditional' footnote citations
reading <sup>1</sup>		reading	reading list
draft		draft	show entry keys
debug		debug	for debugging

<sup>c</sup> -comp option (compact).    <sup>ib</sup> -ibid option (use *ibidem*).    <sup>ic</sup> -icom option (compact & *ibidem*).    <sup>in</sup> -inote option (notes & *ibidem*).  
<sup>n</sup> -note option (full citations as footnotes).    <sup>t</sup> -terse option (omit title)

<sup>a</sup> An `--addon` field is available e.g. `nameaddon`, `eventtitleaddon`.

<sup>o</sup> An `orig-` field is available e.g. `origdate`, `origlanguage`.

<sup>s</sup> A `short-` field is available e.g. `shortauthor`, `shorttitle`.

<sup>u</sup> A `--subtitle` field is available e.g. `subtitle`, `mainsubtitle`.

## Built-In Styles

citestyle	bibstyle	
numeric <sup>c,v</sup>	numeric	numeric
alphabetic <sup>v</sup>	alphabetic	alphabetic
authoryear <sup>c,ib,ic</sup>	authoryear	author-year
authortitle <sup>c,ib,ic,t,tc,tic</sup>	authortitle	
verbose <sup>ib,in,n</sup>	verbose	full reference on first citation
verbose-trad1/2/3 <sup>tr</sup>		‘traditional’ footnote citations
reading <sup>l</sup>	reading	reading list
draft	draft	show entry keys
debug	debug	for debugging

<sup>c</sup> -comp option (compact).    <sup>ib</sup> -ibid option (use *ibidem*).    <sup>ic</sup> -icom option (compact & *ibidem*).    <sup>in</sup> -inote option (notes & *ibidem*).

<sup>n</sup> -note option (full citations as footnotes).    <sup>t</sup> -terse option (omit title if unique).    <sup>tc</sup> -tcomp option (compact & terse).

<sup>tic</sup> -ticomp option (compact, terse & *ibidem*).

<sup>tr</sup> The three use different scholarly abbreviations in different ways.

<sup>v</sup> -verb option (verbose).    <sup>1</sup> Equivalent to `citestyle=authortitle`.

## Multiple, Divided & Filtered Bibliographies

**Bibliography section** Document part with its own bibliography.

**Bibliography segment** Document part corresponding to a sub-division of a global bibliography.

See package options `refsection` and `refsegment` for automated creation according to document division. Finer-grained control is also possible:

```
\begin{refsection}
  [<resource>,...]% replace default list
  ...
\end{refsection}

\begin{refsegment}
  ...
\end{refsegment}
```

**Bibliography category** Topic or source type corresponding to a sub-division of a global bibliography.

```
\DeclareBibliographyCategory{<category>}    new category
\addtocategory{<category>}{<key>}           add entry to category
```

## Printing Bibliographies

```
\printbibliography[<options>]              typeset the bibliography
\printbiblist[<options>]{<name>}            typeset bibliography list <name>
                                           e.g. shorthand
```

*Options:*

```
env      = <name>           e.g. bibliography
heading  = <heading>        e.g. subbibliography, (sub)bibintoc
title     = <text>
prenote  = <name>           } define start/end notes with
postnote = <name>           } \defbibnote{<name>}{<text>}
section  = <integer>        for refsection <integer>
segment  = <integer>        for refsegment <integer>
categoryn = <category>       only entries in <category>
keywordn = <keyword>        only entries with keyword <keyword>
typen    = <entrytype>      only entries of type <entrytype>
```

<sup>n</sup> A negated filter is available as `not-` e.g. `notcategory=<category>`.

```
\bibbysection[<options>]    all refsection bibliographies
\bibbysegment[<options>]    all refsegment bibliographies
\bibbycategory[<options>]   bibliographies for all categories
```

## Biber

```
biber [options] file[.bcf]           biber [options] --tool <datasource>
```

By default, Biber reads a `.bcf` and produces a `.bbl` which L<sup>A</sup>T<sub>E</sub>X needs to produce a document's citations and bibliography. But Biber also has a powerful ‘tool’ mode. The manual explains the details but `biber --help` is a more comprehensible starting point.

To produce a document-specific `.bib`:

```
biber --output_format=bibtex --output_resolve <filename>.bcf
```