

# LooChao Emacs Cheat Sheet

## Keyboard Shortcuts

|          |                                |
|----------|--------------------------------|
| M-f1:    | search in firefox.             |
| M-f2:    | search in w3m.                 |
| g:       | google.                        |
| g:       | google symbol at point.        |
| <hr/>    |                                |
| C -:     | zoom out.                      |
| C =:     | zoom in.                       |
| <hr/>    |                                |
| f1 f1:   | start shell inside emacs.      |
| f1 f2:   | start terminal. (mac)          |
| f2 f2:   | go to last change              |
| f3 f3:   | w3m browse url.                |
| f3 f2:   | switch to existing w3m.        |
| f4 f4:   | open finder. (mac)             |
| f5 f5:   | bm k list.                     |
| f6 f6:   | bm toggle.                     |
| f7 f6:   | dict search (dict.el).         |
| f7 f7:   | dict search symbol (w3m icba). |
| f9 f9:   | hl symbol                      |
| f10 f10: |                                |
| f11 f11: |                                |
| f12 f12: | emms playlist                  |
| <hr/>    |                                |
| M-1:     | start shell inside emacs.      |
| M-g:     | goto char.                     |
| M-k M-k: | kill this buffer.              |
| <hr/>    |                                |
| f5-f5:   | bm k list.                     |
| C-f5:    | jump to bm k.                  |
| S-f5:    | set bm k.                      |
| <hr/>    |                                |
| C-f11:   | menu bar toggle.               |
| S-f11:   | toolbar toggle.                |
| M-f11:   | line num toggle.               |
| C-M-f11: | tabbar toggle.                 |
| C-S-f11: | ruler toggle.                  |
| <hr/>    |                                |
| f2 s:    | spell-mode toggle.             |
| f11 c:   | lang env gb18030.              |
| f11 u:   | lang env utf8.                 |
| <hr/>    |                                |
| C-x f:   | find file at point.            |
| C-x C-f: | open file.                     |
| C-c f:   | run find in dir.               |
| C-x g:   | goto char.                     |
| C-c g:   | run grep in dir.               |
| <hr/>    |                                |
| w3m-mode |                                |
| d:       | kill curren page.              |
| h j k l: | vim traditional move.          |
| H:       | history.                       |
| we:      | history back/forward.          |
| []:      | history back/forward.          |
| np:      | next/prev buffer.              |

## Modes

|                 |                              |
|-----------------|------------------------------|
| artist-mode     | .                            |
| rainbow-mode    | .                            |
| whitespace-mode | .                            |
| el-doc          | display help for elisp func. |

## M-x

|                     |                          |
|---------------------|--------------------------|
| list-colors-display | list colors.             |
| re-builder          | helper to build reg exp. |

## Elegant Colors

slateblue .

## Miscellaneous

C-h v features list all the packages loaded.  
leisure read C-. C-, C-'  
narrow-to-region C-x n n (show region only, C-x n w, widen  
Used at the very beginning of a document:  
\documentclass{class}. Use \begin{document} to start  
contents and \end{document} to end the document.

## Common documentclass options

|   |  |
|---|--|
| 10pt/11pt/12pt                          | Font size.   |
| letterpaper/a4paper                     | Paper size.  |
| twocolumn                               | Use two columns.                                       |
| twoside                                 | Set margins for two-sided.                             |
| landscape                               | Landscape orientation. Must use dvips<br>-t landscape. |
| draft                                   | Double-space lines.                                    |
| Usage: \documentclass[opt, opt]{class}. |  |

## Packages

fullpage Use 1 inch margins.  
anysize Set margins: \marginwidth{l}{r}{t}{b}.  
multicol Use n columns: \begin{multicols}{n}.  
latexsym Use L<sup>A</sup>T<sub>E</sub>X symbol font.  
graphicx Show image: \includegraphics[width=x]{file}.  
url Insert URL: \url{http://...}.  
Use before \begin{document}. Usage: \usepackage{package}

## Title

\author{text} Author of document.  
\title{text} Title of document.  
\date{text} Date.  
These commands go before \begin{document}. The  
declaration \maketitle goes at the top of the document.

## Miscellaneous

\pagestyle{empty} Empty header, footer and no page num-  
bers.

## Document structure

|                    |                       |
|--------------------|-----------------------|
| \part{title}       | \subsubsection{title} |
| \chapter{title}    | \paragraph{title}     |
| \section{title}    | \subparagraph{title}  |
| \subsection{title} |                       |

Section commands can be followed with an \*, like  
\section\*{title}, to supress heading numbers.

`\setcounter{secnumdepth}{x}` supresses heading numbers of depth > *x*, where `chapter` has depth 0.

### Text environments

`\begin{comment}` Comment block (not printed).  
`\begin{quote}` Indented quotation block.  
`\begin{quotation}` Like `quote` with indented paragraphs.  
`\begin{verse}` Quotation block for verse.

### Lists

`\begin{enumerate}` Numbered list.  
`\begin{itemize}` Bulleted list.  
`\begin{description}` Description list.  
`\item text` Add an item.  
`\item[x] text` Use *x* instead of normal bullet or number.  
Required for descriptions.

### References

`\label{marker}` Set a marker for cross-reference, often of the form `\label{sec:item}`.  
`\ref{marker}` Give section/body number of marker.  
`\pageref{marker}` Give page number of marker.  
`\footnote{text}` Print footnote at bottom of page.

### Floating bodies

`\begin{table}[place]` Add numbered table.  
`\begin{figure}[place]` Add numbered figure.  
`\begin{equation}[place]` Add numbered equation.  
`\caption{text}` Caption for the body.  
The *place* is a list valid placements for the body. t=top, h=here, b=bottom, p=separate page, !=place even if ugly. Captions and label markers should be within the environment.

## Text properties

### Font face

| Command                               | Declaration                          | Effect               |
|---------------------------------------|--------------------------------------|----------------------|
| <code>\textrm{<i>text</i>}</code>     | <code>\rmfamily <i>text</i></code>   | Roman family         |
| <code>\textsf{<i>text</i>}</code>     | <code>\sffamily <i>text</i></code>   | Sans serif family    |
| <code>\texttt{<i>text</i>}</code>     | <code>\ttfamily <i>text</i></code>   | Typewriter family    |
| <code>\textmd{<i>text</i>}</code>     | <code>\mdseries <i>text</i></code>   | Medium series        |
| <code>\textbf{<i>text</i>}</code>     | <code>\bfseries <i>text</i></code>   | <b>Bold series</b>   |
| <code>\textup{<i>text</i>}</code>     | <code>\upshape <i>text</i></code>    | Upright shape        |
| <code>\textit{<i>text</i>}</code>     | <code>\itshape <i>text</i></code>    | <i>Italic shape</i>  |
| <code>\textsl{<i>text</i>}</code>     | <code>\slshape <i>text</i></code>    | <i>Slanted shape</i> |
| <code>\textsc{<i>text</i>}</code>     | <code>\scshape <i>text</i></code>    | SMALL CAPS SHAPE     |
| <code>\emph{<i>text</i>}</code>       | <code>\em <i>text</i></code>         | <i>Emphasized</i>    |
| <code>\textnormal{<i>text</i>}</code> | <code>\normalfont <i>text</i></code> | Document font        |
| <code>\underline{<i>text</i>}</code>  |                                      | <u>Underline</u>     |

The command (*tttt*) form handles spacing better than the declaration (*tttt*) form.

### Font size

|                            |                             |                     |       |
|----------------------------|-----------------------------|---------------------|-------|
| <code>\tiny</code>         | <small>tiny</small>         | <code>\Large</code> | Large |
| <code>\scriptsize</code>   | <small>scriptsize</small>   | <code>\LARGE</code> | LARGE |
| <code>\footnotesize</code> | <small>footnotesize</small> |                     |       |
| <code>\small</code>        | <small>small</small>        | <code>\huge</code>  | huge  |
| <code>\normalsize</code>   | <small>normalsize</small>   |                     |       |
| <code>\large</code>        | <small>large</small>        | <code>\Huge</code>  | Huge  |

These are declarations and should be used in the form `{\small ...}`, or without braces to affect the entire document.

### Verbatim text

`\begin{verbatim}` Verbatim environment.  
`\begin{verbatim*}` Spaces are shown as `\_`.  
`\verb!text!` Text between the delimiting characters (in this case ‘!’) is verbatim.

### Justification

| Environment                     | Declaration               |
|---------------------------------|---------------------------|
| <code>\begin{center}</code>     | <code>\centering</code>   |
| <code>\begin{flushleft}</code>  | <code>\raggedright</code> |
| <code>\begin{flushright}</code> | <code>\raggedleft</code>  |

### Miscellaneous

`\linespread{x}` changes the line spacing by the multiplier *x*.

## Text-mode symbols

### Symbols

|                    |                     |                |                     |                  |                       |                |                             |
|--------------------|---------------------|----------------|---------------------|------------------|-----------------------|----------------|-----------------------------|
| <code>&amp;</code> | <code>\&amp;</code> | <code>-</code> | <code>\_</code>     | <code>...</code> | <code>\ldots</code>   | <code>•</code> | <code>\textbullet</code>    |
| <code>\$</code>    | <code>\\$</code>    | <code>^</code> | <code>\^{}{}</code> | <code> </code>   | <code>\textbar</code> | <code>\</code> | <code>\textbackslash</code> |
| <code>%</code>     | <code>\%</code>     | <code>~</code> | <code>\~{}{}</code> | <code>#</code>   | <code>\#</code>       | <code>§</code> | <code>\S</code>             |

### Accents

|                |                   |                |                   |                |                   |                |                    |                |                   |
|----------------|-------------------|----------------|-------------------|----------------|-------------------|----------------|--------------------|----------------|-------------------|
| <code>ò</code> | <code>\'o</code>  | <code>ó</code> | <code>\'o</code>  | <code>ô</code> | <code>\^o</code>  | <code>õ</code> | <code>\~o</code>   | <code>ö</code> | <code>\=o</code>  |
| <code>ô</code> | <code>\.o</code>  | <code>ö</code> | <code>\"o</code>  | <code>q</code> | <code>\c o</code> | <code>õ</code> | <code>\v o</code>  | <code>ő</code> | <code>\H o</code> |
| <code>ç</code> | <code>\c c</code> | <code>q</code> | <code>\d o</code> | <code>q</code> | <code>\b o</code> | <code>ö</code> | <code>\t oo</code> | <code>œ</code> | <code>\oe</code>  |
| <code>Œ</code> | <code>\OE</code>  | <code>æ</code> | <code>\ae</code>  | <code>Æ</code> | <code>\AE</code>  | <code>å</code> | <code>\aa</code>   | <code>Å</code> | <code>\AA</code>  |
| <code>ø</code> | <code>\o</code>   | <code>Ø</code> | <code>\O</code>   | <code>ı</code> | <code>\l</code>   | <code>L</code> | <code>\L</code>    | <code>ı</code> | <code>\i</code>   |
| <code>j</code> | <code>\j</code>   | <code>i</code> | <code>\i</code>   | <code>ı</code> | <code>\i</code>   |                |                    |                |                   |

### Delimiters

|                |                               |                |                              |                |                                |                |                           |
|----------------|-------------------------------|----------------|------------------------------|----------------|--------------------------------|----------------|---------------------------|
| <code>'</code> | <code>\textquotesingle</code> | <code>{</code> | <code>\textleftbrace</code>  | <code>[</code> | <code>\textleftbracket</code>  | <code>(</code> | <code>\textless</code>    |
| <code>,</code> | <code>\textcomma</code>       | <code>}</code> | <code>\textrightbrace</code> | <code>]</code> | <code>\textrightbracket</code> | <code>)</code> | <code>\textgreater</code> |

### Dashes

| Name    | Source | Example    | Usage            |
|---------|--------|------------|------------------|
| hyphen  | -      | X-ray      | In words.        |
| en-dash | --     | 1–5        | Between numbers. |
| em-dash | ---    | Yes—or no? | Punctuation.     |

### Line and page breaks

`\` Begin new line without new paragraph.  
`\*` Prohibit pagebreak after linebreak.  
`\kill` Don't print current line.  
`\pagebreak` Start new page.  
`\noindent` Do not indent current line.

### Miscellaneous

`\today` August 19, 2011.  
`\sim$` Prints `~` instead of `\_{}{}`, which makes `~`.  
`~` Space, disallow linebreak (W.J.~Clinton).  
`\@.` Indicate that the . ends a sentence when following an uppercase letter.  
`\hspace{l}` Horizontal space of length *l* (Ex: *l* = 20pt).  
`\vspace{l}` Vertical space of length *l*.  
`\rule{w}{h}` Line of width *w* and height *h*.

## Tabular environments

### tabbing environment

`\=` Set tab stop. `\>` Go to tab stop.  
Tab stops can be set on “invisible” lines with `\kill` at the end of the line. Normally `\` is used to separate lines.

### tabular environment

`\begin{array}[pos]{cols}`  
`\begin{tabular}[pos]{cols}`  
`\begin{tabular*}{width}[pos]{cols}`

### tabular column specification

`l` Left-justified column.  
`c` Centered column.  
`r` Right-justified column.  
`p{width}` Same as `\parbox[t]{width}`.  
`@{decl}` Insert *decl* instead of inter-column space.  
`|` Inserts a vertical line between columns.

### tabular elements

`\hline` Horizontal line between rows.  
`\cline{x-y}` Horizontal line across columns *x* through *y*.  
`\multicolumn{n}{cols}{text}`  
A cell that spans *n* columns, with *cols* column specification.

## Math mode

To use math mode, surround text with `$` or use `\begin{equation}`.

|                                 |                          |                               |                            |
|---------------------------------|--------------------------|-------------------------------|----------------------------|
| Superscript <sup><i>x</i></sup> | <code>\^{}{x}</code>     | Subscript <sub><i>x</i></sub> | <code>\_{}{x}</code>       |
| $\frac{x}{y}$                   | <code>\frac{x}{y}</code> | $\sum_{k=1}^n$                | <code>\sum_{k=1}^n</code>  |
| $\sqrt[n]{x}$                   | <code>\sqrt[n]{x}</code> | $\prod_{k=1}^n$               | <code>\prod_{k=1}^n</code> |

### Math-mode symbols

|                       |                      |                     |                              |
|-----------------------|----------------------|---------------------|------------------------------|
| <code>\leq</code>     | <code>\geq</code>    | <code>\neq</code>   | <code>\approx</code>         |
| <code>\times</code>   | <code>\div</code>    | <code>\pm</code>    | <code>\cdot</code>           |
| <code>\circ</code>    | <code>\circ</code>   | <code>\prime</code> | <code>\cdots</code>          |
| <code>\infty</code>   | <code>\neg</code>    | <code>\wedge</code> | <code>\vee</code>            |
| <code>\supset</code>  | <code>\forall</code> | <code>\in</code>    | <code>\rightarrow</code>     |
| <code>\subset</code>  | <code>\exists</code> | <code>\notin</code> | <code>\Rightarrow</code>     |
| <code>\cup</code>     | <code>\cap</code>    | <code>\mid</code>   | <code>\Leftrightarrow</code> |
| <code>\dot a</code>   | <code>\hat a</code>  | <code>\bar a</code> | <code>\tilde a</code>        |
| <code>\alpha</code>   | <code>\beta</code>   | <code>\gamma</code> | <code>\delta</code>          |
| <code>\epsilon</code> | <code>\zeta</code>   | <code>\eta</code>   | <code>\varepsilon</code>     |
| <code>\theta</code>   | <code>\iota</code>   | <code>\kappa</code> | <code>\vartheta</code>       |
| <code>\lambda</code>  | <code>\mu</code>     | <code>\nu</code>    | <code>\xi</code>             |
| <code>\pi</code>      | <code>\rho</code>    | <code>\sigma</code> | <code>\tau</code>            |
| <code>\upsilon</code> | <code>\phi</code>    | <code>\chi</code>   | <code>\psi</code>            |
| <code>\omega</code>   | <code>\Gamma</code>  | <code>\Delta</code> | <code>\Theta</code>          |
| <code>\Lambda</code>  | <code>\Xi</code>     | <code>\Pi</code>    | <code>\Sigma</code>          |
| <code>\Upsilon</code> | <code>\Phi</code>    | <code>\Psi</code>   | <code>\Omega</code>          |

## Bibliography and citations

When using BibTeX, you need to run `latex`, `bibtex`, and `latex` twice more to resolve dependencies.

## Citation types

|                               |  |
|-------------------------------|--|
| <code>\cite{key}</code>       | Full author list and year. (Watson and Crick 1953) |
| <code>\citeA{key}</code>      | Full author list. (Watson and Crick)               |
| <code>\citeN{key}</code>      | Full author list and year. Watson and Crick (1953) |
| <code>\shortcite{key}</code>  | Abbreviated author list and year. ?                |
| <code>\shortciteA{key}</code> | Abbreviated author list. ?                         |
| <code>\shortciteN{key}</code> | Abbreviated author list and year. ?                |
| <code>\citeyear{key}</code>   | Cite year only. (1953)                             |

All the above have an NP variant without parentheses; Ex. `\citeNP`.

## BIB<sub>TEX</sub> entry types

|                            |  |
|----------------------------|--|
| <code>@article</code>      | Journal or magazine article.             |
| <code>@book</code>         | Book with publisher.                     |
| <code>@booklet</code>      | Book without publisher.                  |
| <code>@conference</code>   | Article in conference proceedings.       |
| <code>@inbook</code>       | A part of a book and/or range of pages.  |
| <code>@incollection</code> | A part of book with its own title.       |
| <code>@misc</code>         | If nothing else fits.                    |
| <code>@phdthesis</code>    | PhD. thesis.                             |
| <code>@proceedings</code>  | Proceedings of a conference.             |
| <code>@techreport</code>   | Tech report, usually numbered in series. |
| <code>@unpublished</code>  | Unpublished.                             |

## BIB<sub>TEX</sub> fields

|                           |   |
|---------------------------|---|
| <code>address</code>      | Address of publisher. Not necessary for major publishers. |
| <code>author</code>       | Names of authors, of format ....                          |
| <code>booktitle</code>    | Title of book when part of it is cited.                   |
| <code>chapter</code>      | Chapter or section number.                                |
| <code>edition</code>      | Edition of a book.  |
| <code>editor</code>       | Names of editors.   |
| <code>institution</code>  | Sponsoring institution of tech. report.                   |
| <code>journal</code>      | Journal name.   |
| <code>key</code>          | Used for cross ref. when no author.                       |
| <code>month</code>        | Month published. Use 3-letter abbreviation.               |
| <code>note</code>         | Any additional information.                               |
| <code>number</code>       | Number of journal or magazine.                            |
| <code>organization</code> | Organization that sponsors a conference.                  |
| <code>pages</code>        | Page range (2,6,9--12).                                   |
| <code>publisher</code>    | Publisher's name.   |
| <code>school</code>       | Name of school (for thesis).                              |
| <code>series</code>       | Name of series of books.                                  |
| <code>title</code>        | Title of work.  |
| <code>type</code>         | Type of tech. report, ex. "Research Note".                |
| <code>volume</code>       | Volume of a journal or book.                              |
| <code>year</code>         | Year of publication.                                      |

Not all fields need to be filled. See example below.

## Common BIB<sub>TEX</sub> style files

|                    |          |                       |                     |
|--------------------|----------|-----------------------|---------------------|
| <code>abbrv</code> | Standard | <code>abstract</code> | alpha with abstract |
| <code>alpha</code> | Standard | <code>apa</code>      | APA                 |
| <code>plain</code> | Standard | <code>unsrt</code>    | Unsorted            |

The L<sup>A</sup>T<sub>E</sub>X document should have the following two lines just before `\end{document}`, where `bibfile.bib` is the name of the BIB<sub>TEX</sub> file.

```
\bibliographystyle{plain}
\bibliography{bibfile}
```

## BIB<sub>TEX</sub> example

The BIB<sub>TEX</sub> database goes in a file called *file.bib*, which is processed with `bibtex` file.

```
@String{N = {Na\~{t}ure}}
@Article{WC:1953,
```

```
author = {James Watson and Francis Crick},
title = {A structure for Deoxyribose Nucleic Acid},
journal = N,
volume = {171},
pages = {737},
year = 1953
}
```

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

```
\documentclass[11pt]{article}
\usepackage{fullpage}
\title{Template}
\author{Name}
\begin{document}
\maketitle

\section{section}
\subsection*{subsection without number}
text \textbf{bold text} text. Some math:  $2+2=5$ 
\subsection{subsection}
text \emph{emphasized text} text. \cite{WC:1953}
discovered the structure of DNA.
```

```
A table:
\begin{table}[!th]
\begin{tabular}{|l|c|r|}
\hline
first & row & data \\
second & row & data \\
\hline
\end{tabular}
\caption{This is the caption}
\label{ex:table}
\end{table}
```

```
The table is numbered \ref{ex:table}.
\end{document}
```

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<http://www.stdout.org/~winston/latex/>