

# Package ‘rticles’

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**Type** Package

**Title** Article Formats for R Markdown

**Version** 0.16

**Description** A suite of custom R Markdown formats and templates for authoring journal articles and conference submissions.

**License** GPL-3

**Imports** utils, rmarkdown (>= 1.18), knitr (>= 1.30), yaml, tinytex (>= 0.19), xfun

**SystemRequirements** GNU make

**URL** <https://github.com/rstudio/rticles>

**BugReports** <https://github.com/rstudio/rticles/issues>

**RoxygenNote** 7.1.1

**Suggests** testit, bookdown, xtable

**Encoding** UTF-8

**NeedsCompilation** no

**Author** JJ Allaire [aut],  
Yihui Xie [aut, cre] (<<https://orcid.org/0000-0003-0645-5666>>),  
R Foundation [aut, cph],  
Hadley Wickham [aut],  
Journal of Statistical Software [aut, cph],  
RStudio [cph],  
Ramnath Vaidyanathan [aut, cph],  
Association for Computing Machinery [aut, cph],  
Carl Boettiger [aut, cph],  
Elsevier [aut, cph],  
Karl Broman [aut, cph],  
Kirill Mueller [aut, cph],  
Bastiaan Quast [aut, cph],  
Randall Pruim [aut, cph],  
Ben Marwick [aut, cph],  
Charlotte Wickham [aut, cph],

Oliver Keyes [aut, cph],  
 Miao Yu [aut, cph],  
 Daniel Emaasit [aut, cph],  
 Thierry Onkelinx [aut, cph],  
 Alessandro Gasparini [aut, cph]  
 (<<https://orcid.org/0000-0002-8319-7624>>),  
 Marc-Andre Desautels [aut, cph],  
 Dominik Leutnant [aut, cph] (<<https://orcid.org/0000-0003-3293-2315>>),  
 MDPI [aut, cph],  
 Taylor and Francis [aut, cph],  
 Oğuzhan Öğreden [aut] (<<https://orcid.org/0000-0002-9949-3348>>),  
 Dalton Hance [aut],  
 Daniel Nüst [aut, cph] (<<https://orcid.org/0000-0002-0024-5046>>),  
 Petter Uvesten [aut, cph],  
 Elio Campitelli [aut, cph] (<<https://orcid.org/0000-0002-7742-9230>>),  
 John Muschelli [aut, cph] (<<https://orcid.org/0000-0001-6469-1750>>),  
 Alex Hayes [aut] (<<https://orcid.org/0000-0002-4985-5160>>),  
 Zhian N. Kamvar [aut, cph] (<<https://orcid.org/0000-0003-1458-7108>>),  
 Noam Ross [aut, cph] (<<https://orcid.org/0000-0002-2136-0000>>),  
 Robrecht Cannoodt [aut, cph] (<<https://orcid.org/0000-0003-3641-729X>>,  
 rcannood),  
 Duncan Luguern [aut],  
 David M. Kaplan [aut, ctb] (<<https://orcid.org/0000-0001-6087-359X>>,  
 dmkaplan2000),  
 Sebastian Kreuzer [aut] (<<https://orcid.org/0000-0002-0734-2199>>),  
 Shixiang Wang [aut, ctb] (<<https://orcid.org/0000-0001-9855-7357>>),  
 Jay Hesselberth [aut, ctb] (<<https://orcid.org/0000-0002-6299-179X>>),  
 Alfredo Hernández [ctb] (<<https://orcid.org/0000-0002-2660-4545>>),  
 Christophe Dervieux [aut] (<<https://orcid.org/0000-0003-4474-2498>>)

**Maintainer** Yihui Xie <[xie@yihui.name](mailto:xie@yihui.name)>

**Repository** CRAN

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**Description**

Most article formats are based on `rmarkdown::pdf_document()`, with a custom Pandoc LaTeX template and different default values for other arguments (e.g., `keep_tex = TRUE`).

**Usage**

```
acm_article(...)
```

```
acs_article(  
  ...,  
  keep_tex = TRUE,  
  md_extensions = c("-autolink_bare_uris"),  
  fig_caption = TRUE  
)
```

```
aea_article(..., keep_tex = TRUE, md_extensions = c("-autolink_bare_uris"))
```

```
agu_article(  
  ...,  
  keep_tex = TRUE,  
  citation_package = "natbib",  
  highlight = NULL,  
  md_extensions = c("-autolink_bare_uris", "-auto_identifiers")  
)
```

```
amq_article(  
  ...,  
  latex_engine = "xelatex",  
  keep_tex = TRUE,  
  fig_caption = TRUE,  
  md_extensions = c("-autolink_bare_uris")  
)
```

```
ams_article(..., keep_tex = TRUE, md_extensions = c("-autolink_bare_uris"))
```

```
asa_article(..., keep_tex = TRUE, citation_package = "natbib")
```

```
arxiv_article(..., keep_tex = TRUE)
```

```
bioinformatics_article(..., keep_tex = TRUE, citation_package = "natbib")
```

```
biometrics_article(..., keep_tex = TRUE, citation_package = "natbib")
```

```
ctex_article(..., template = "default", latex_engine = "xelatex")
ctex(..., template = "default", latex_engine = "xelatex")
elsevier_article(
  ...,
  keep_tex = TRUE,
  md_extensions = c("-autolink_bare_uris")
)
frontiers_article(..., keep_tex = TRUE)
mdpi_article(..., keep_tex = TRUE)
mnras_article(..., keep_tex = TRUE, fig_caption = TRUE)
oup_article(..., keep_tex = TRUE, md_extensions = c("-autolink_bare_uris"))
peerj_article(..., keep_tex = TRUE)
plos_article(..., keep_tex = TRUE, md_extensions = c("-autolink_bare_uris"))
pnas_article(..., keep_tex = TRUE)
sage_article(..., highlight = NULL, citation_package = "natbib")
sim_article(..., highlight = NULL, citation_package = "natbib")
springer_article(..., keep_tex = TRUE, citation_package = "none")
tf_article(..., keep_tex = TRUE, citation_package = "natbib")
```

### Arguments

..., keep\_tex, latex\_engine, citation\_package, highlight, fig\_caption, md\_extensions, template  
Arguments passed to `rmarkdown::pdf_document()`.

### Value

An R Markdown output format.

### Details

You can find more details about each output format below.

### acm\_article

Format for creating an Association for Computing Machinery (ACM) articles. Adapted from <https://www.acm.org/publications/proceedings-template>.

acs\_article

Format for creating an American Chemical Society (ACS) Journal articles. Adapted from <https://pubs.acs.org/page/4authors/submission/tex.html>.

aea\_article

Format for creating submissions to the American Economic Association (AER, AEJ, JEL, PP).

agu\_article

Format for creating a American Geophysical Union (AGU) article. Adapted from <https://www.agu.org/Publish-with-AGU/Publish/#1>.

amq\_article

Ce format a été adapté du format du bulletin de l'AMQ.

ams\_article

Format for creating an American Meteorological Society (AMS) Journal articles. Adapted from <https://www.ametsoc.org/ams/index.cfm/publications/authors/journal-and-bams-authors/author-resources/latex-author-info/>.

asa\_article

This format was adapted from The American Statistician (TAS) format, but it should be fairly consistent across American Statistical Association (ASA) journals.

arxiv\_article

Adapted from the George Kour's format for arXiv and bio-arXiv preprints. So far as I'm aware, entirely unofficial but still a staple.

bioinformatics\_article

Format for creating submissions to a Bioinformatics journal. Adapted from [https://academic.oup.com/bioinformatics/pages/submission\\_online](https://academic.oup.com/bioinformatics/pages/submission_online).

biometrics\_article

This format was adapted from the Biometrics journal.

ctex\_article

A wrapper function for `rmarkdown::pdf_document()` and the default value of `latex_engine` is changed to `xelatex`, so it works better for typesetting Chinese documents with the LaTeX package **ctex**. The function `ctex` is an alias of `ctex_article`.

#### elsevier\_article

Format for creating submissions to Elsevier journals. Adapted from <https://www.elsevier.com/authors/author-schemas/latex-instructions>.

#### frontiers\_article

Format for creating Frontiers journal articles. Adapted from <https://www.frontiersin.org/about/author-guidelines>.

#### mdpi\_article

Format for creating submissions to Multidisciplinary Digital Publishing Institute (MDPI) journals. Adapted from <https://www.mdpi.com/authors/latex>.

#### mnras\_article

Format for creating an Monthly Notices of Royal Astronomical Society (MNRAS) Journal articles. Adapted from <https://ras.ac.uk>.

#### oup\_article

Format for creating submissions to many Oxford University Press journals. Adapted from [https://academic.oup.com/journals/pages/authors/preparing\\_your\\_manuscript](https://academic.oup.com/journals/pages/authors/preparing_your_manuscript) and [https://academic.oup.com/icesjms/pages/General\\_Instructions](https://academic.oup.com/icesjms/pages/General_Instructions).

#### peerj\_article

Format for creating submissions to The PeerJ Journal. This was adapted from the [PeerJ Overleaf Template](#).

#### plos\_article

Format for creating submissions to PLOS journals. Adapted from <https://journals.plos.org/ploscompbiol/s/latex>.

#### pnas\_article

Format for creating submissions to PNAS journals.

#### sage\_article

Format for creating submissions to Sage Journals. Based on the official Sage Journals <https://uk.sagepub.com/sites/default/files>  
Possible arguments for the YAML header are:

- title title of the manuscript
- runninghead short author list for header
- author list of authors, containing name and num
- address list containing num and org for defining author affiliations

- corrauth corresponding author name and address
- email correspondence email
- abstract abstract, limited to 200 words
- keywords keywords for the article
- bibliography BibTeX .bib file name
- classoption options of the sagej class
- header-includes: custom additions to the header, before the `\begin{document}` statement
- include-after: for including additional LaTeX code before the `\end{document}` statement

### sim\_article

Format for creating submissions to Statistics in Medicine. Based on the official Statistics in Medicine [class](#).

Possible arguments for the YAML header are:

- title title of the manuscript
- author list of authors, containing name and num
- address list containing num and org for defining author affiliations
- presentaddress not sure what they mean with this
- corres author and address for correspondence
- authormark short author list for header
- received, revised, accepted dates of submission, revision, and acceptance of the manuscript
- abstract abstract, limited to 250 words
- keywords up to 6 keywords
- bibliography BibTeX .bib file
- classoption options of the WileyNJD-v2 class
- longtable set to true to include the longtable package, used by default from pandoc to convert markdown to LaTeX code
- header-includes: custom additions to the header, before the `\begin{document}` statement
- include-after: for including additional LaTeX code before the `\end{document}` statement

### springer\_article

This format was adapted from the Springer Macro package for Springer Journals.

### tf\_article

Format for creating submissions to a Taylor & Francis journal. Adapted from <https://www.tandf.co.uk/journals/authors/InteractCADLaTeX.zip>.

### Examples

```
## Not run:
rmarkdown::draft("MyArticle.Rmd", template = "acm", package = "rticles")
rmarkdown::draft("MyArticle.Rmd", template = "asa", package = "rticles")
## End(Not run)
```

---

copernicus\_article      *Copernicus journals format.*

---

## Description

Format for creating submissions to Copernicus journals.

## Usage

```
copernicus_article(
  ...,
  keep_tex = TRUE,
  citation_package = "natbib",
  md_extensions = c("-autolink_bare_uris", "-auto_identifiers")
)

copernicus_journal_abbreviations(journal_name = "*")
```

## Arguments

|                               |   |
|-------------------------------|---|
| ...                           | Additional arguments to <code>rmarkdown::pdf_document()</code> .  |
| <code>keep_tex</code>         | Keep the intermediate tex file used in the conversion to PDF  |
| <code>citation_package</code> | The LaTeX package to process citations, <code>natbib</code> or <code>biblatex</code> . Use default if neither package is to be used, which means citations will be processed via the command <code>pandoc-citeproc</code> . |
| <code>md_extensions</code>    | Markdown extensions to be added or removed from the default definition or R Markdown. See the <a href="#">rmarkdown_format</a> for additional details.  |
| <code>journal_name</code>     | A regular expression to filter the by the journal name, see pattern in <a href="#">grep</a> ; defaults to <code>*</code> .  |

## Details

This was adapted from [https://publications.copernicus.org/for\\_authors/manuscript\\_preparation.html](https://publications.copernicus.org/for_authors/manuscript_preparation.html).

An number of required and optional manuscript sections, e.g. `acknowledgements`, `competinginterests`, or `authorcontribution`, must be declared using the respective properties of the R Markdown header - see skeleton file.

**Version:** Based on `copernicus_package.zip` in the version 5.3, 18 February 2019, using `copernicus.cls` in version 8.82.

**Copernicus journal abbreviations:** You can use the function `copernicus_journal_abbreviations()` to get the journal abbreviation for all journals supported by the copernicus article template.

**Important note:** The online guidelines by Copernicus are the official resource. Copernicus is not responsible for the community contributions made to support the template in this package. Copernicus converts all typeset TeX files into XML, the expressions and markups have to be highly standardized. Therefore, please keep the following in mind:



- Please provide only one figure file for figures with several panels, and please do not use `\subfloat` or similar commands.
- Please use only commands in which words, numbers, etc. are within braces (e.g. `\textrm{TEXT}` instead of `{\rm TEXT}`).
- For algorithms, please use the syntax given in `template.tex` or provide your algorithm as a figure.
- Please do not define new commands.
- The most commonly used packages (`\usepackage{}`) are integrated in the `copernicus.cls`. Some other packages often used by the community are defined in `template.tex`. Please do not insert additional ones in your `*.tex` file.
- Spaces in labels (`\label{}`) are not allowed; please make sure that no label name is assigned more than once.
- Please do not use `\paragraph{}`; only `\subsubsection{}` is allowed.
- It is not possible to add tables in colour.

### Value

An R Markdown output format.

### Note

If you use `rmarkdown::pdf_document()`, all internal references (i.e. tables and figures) must use `\ref{}` whereas with `bookdown::pdf_document2()`, you can additionally use `\@ref()`.

### References

Manuscript preparation guidelines for authors. [https://publications.copernicus.org/for\\_authors/manuscript\\_preparation.html](https://publications.copernicus.org/for_authors/manuscript_preparation.html)

### Examples

```
names(copernicus_journal_abbreviations())
copernicus_journal_abbreviations(journal_name = "Science Data")
## Not run:
library("rmarkdown")
draft("MyArticle.Rmd", template = "copernicus", package = "rticles")
render("MyArticle/MyArticle.Rmd")

## End(Not run)
```

---

iee\_article

*IEEE Transactions journal format.*


---

### Description

Format for creating submissions to IEEE Transaction journals. Adapted from [http://www.ieee.org/publications\\_standards/publications/authors/author\\_templates.html](http://www.ieee.org/publications_standards/publications/authors/author_templates.html).

### Usage

```
iee_article(
  draftmode = c("final", "draft", "draftcls", "draftclsnofoot"),
  hyphenfixes = "op-tical net-works semi-conduc-tor",
  IEEEspecialpaper = "",
  with_ifpdf = FALSE,
  with_cite = FALSE,
  with_amsmath = FALSE,
  with_algorithmic = FALSE,
  with_subfig = FALSE,
  with_array = FALSE,
  with_dbfloatfix = FALSE,
  keep_tex = TRUE,
  pandoc_args = NULL,
  md_extensions = c("-autolink_bare_uris"),
  ...
)
```

### Arguments

|                               |  |
|-------------------------------|--|
| <code>draftmode</code>        | Specify the draft mode to control spacing and whether images should be rendered. Valid options are: "final" (default), "draft", "draftcls", or "draftclsnofoot". |
| <code>hyphenfixes</code>      | A character value that provides the correct hyphenations for ambiguous words. Separate new words with spaces.  |
| <code>IEEEspecialpaper</code> | A character value containing the publication's special paper designation.  |
| <code>with_ifpdf</code>       | A logical value turning on (TRUE) or off (FALSE) the ifpdf LaTeX package.  |
| <code>with_cite</code>        | A logical value turning on (TRUE) or off (FALSE) the cite LaTeX package.   |
| <code>with_amsmath</code>     | A logical value turning on (TRUE) or off (FALSE) the amsmath LaTeX package.  |
| <code>with_algorithmic</code> | A logical value turning on (TRUE) or off (FALSE) the algorithmic LaTeX package.  |
| <code>with_subfig</code>      | A logical value turning on (TRUE) or off (FALSE) the subfig LaTeX package.   |
| <code>with_array</code>       | A logical value turning on (TRUE) or off (FALSE) the array LaTeX package.  |

|                 |  |
|-----------------|--|
| with_dbfloatfix | A logical value turning on (TRUE) or off (FALSE) the dbfloatfix LaTeX package.   |
| keep_tex        | Keep the intermediate tex file used in the conversion to PDF   |
| pandoc_args     | Additional command line options to pass to pandoc  |
| md_extensions   | Markdown extensions to be added or removed from the default definition or R Markdown. See the <a href="#">rmarkdown_format</a> for additional details. |
| ...             | Additional arguments to <code>rmarkdown::pdf_document</code>   |

### Details

Presently, only the "conference" paper mode offered by the `IEEEtran.cls` is supported.

### References

Shell, Michael. "How to use the IEEEtran LATEX class." *Journal of LATEX Class Files* 1.11 (2002): 10-20. [http://mirrors.rit.edu/CTAN/macros/latex/contrib/IEEEtran/IEEEtran\\_HOWTO.pdf](http://mirrors.rit.edu/CTAN/macros/latex/contrib/IEEEtran/IEEEtran_HOWTO.pdf)

---

|              |   |
|--------------|---|
| joss_article | <i>Journal of Open Source Software (JOSS) format.</i> |
|--------------|---|

---

### Description

Format for creating a Journal of Open Source Software (JOSS) or Journal of Open Source Education (JOSE) articles. Adapted from <https://github.com/openjournals/whedon>. As these journals take articles as markdown, this format can be used to generate markdown from R Markdown and to locally preview how the article will appear as PDF.

### Usage

```
joss_article(journal = "JOSS", keep_md = TRUE, latex_engine = "xelatex", ...)
```

### Arguments

|                   |   |
|-------------------|---|
| journal           | one of "JOSS" or "JOSE"   |
| keep_md           | Whether to retain the intermediate markdown and images. Defaults to TRUE. |
| latex_engine, ... | Arguments passed to <code>rmarkdown::pdf_document</code>                  |

### Details

The following variables may be set in YAML metadata to populate fields in the article PDF, but are only necessary for local preview: `formatted_doi`, `citation_author`, `year`, `volume`, `issue`, `page`, `submitted`, `published` and `archive_doi`.

---

journals

*List available journals*


---

### Description

List available journal names in this package.

### Usage

```
journals()
```

### Details

These names can be useful in two ways:

- You can add `_article` suffix to get the name of the output format (e.g., `rjournal_article()`).
- You can use the name directly in the template argument of `rmarkdown::draft()`.

### Value

A character vector of the journal names.

### Examples

```
articles::journals()
```

---

jss\_article

*Journal of Statistical Software (JSS) format.*


---

### Description

Format for creating a Journal of Statistical Software (JSS) articles. Adapted from <https://www.jstatsoft.org/about/submissions>.

### Usage

```
jss_article(
  ...,
  keep_tex = TRUE,
  citation_package = "natbib",
  pandoc_args = NULL
)
```

**Arguments**

|                               |   |
|-------------------------------|---|
| ...                           | Arguments to <code>rmarkdown::pdf_document</code>   |
| <code>keep_tex</code>         | Keep the intermediate tex file used in the conversion to PDF  |
| <code>citation_package</code> | The LaTeX package to process citations, <code>natbib</code> or <code>bibtex</code> . Use default if neither package is to be used, which means citations will be processed via the command <code>pandoc-citeproc</code> . |
| <code>pandoc_args</code>      | Additional command line options to pass to <code>pandoc</code>  |

---

`rjournal_article`      *R Journal format.*

---

**Description**

Format for creating R Journal articles. Adapted from <https://journal.r-project.org/submissions.html>.

**Usage**

```
rjournal_article(..., keep_tex = TRUE, citation_package = "natbib")
```

**Arguments**

|                               |   |
|-------------------------------|---|
| ...                           | Arguments to <code>rmarkdown::pdf_document</code> .   |
| <code>keep_tex</code>         | Keep the intermediate tex file used in the conversion to PDF  |
| <code>citation_package</code> | The LaTeX package to process citations, <code>natbib</code> or <code>bibtex</code> . Use default if neither package is to be used, which means citations will be processed via the command <code>pandoc-citeproc</code> . |

**Details**

This file is only a basic article template. For full details of *The R Journal* style and information on how to prepare your article for submission, see the [Instructions for Authors](#)

**About this format and the R Journal requirements:**

`rticles::rjournal_article` will help you build the correct files requirements:

- A R file will be generated automatically using `kni tr::purl` - see <https://bookdown.org/yihui/rmarkdown-cookbook/purl.html> for more information.
- A tex file will be generated from this Rmd file and correctly included in `RJwrapper.tex` as expected to build `RJwrapper.pdf`.
- All figure files will be kept in the default `rmarkdown*_files` folder. This happens because `keep_tex = TRUE` by default in `rticles::rjournal_article`
- Only the bib filename is to be modified. An example bib file is included in the template (`RJreferences.bib`) and you will have to name your bib file as the `tex`, `R`, and `pdf` files.

### About YAML header fields

This section documents some of the YAML fields that can be used with this formats.

#### The author field in the YAML header:

| FIELD        | TYPE            | DESCRIPTION  |
|--------------|-----------------|--|
| name         | <i>required</i> | name and surname of the author                           |
| affiliation  | <i>required</i> | name of the author's affiliation                         |
| address      | <i>required</i> | at least one address line for the affiliation            |
| url          | <i>optional</i> | an additional url for the author or the main affiliation |
| orcid        | <i>optional</i> | the authors ORCID if available                           |
| email        | <i>required</i> | the author's e-mail address                              |
| affiliation2 | <i>optional</i> | name of the author's 2nd affiliation                     |
| address2     | <i>optional</i> | address lines belonging to the author's 2nd affiliation  |

*Please note: Only one url, orcid and email can be provided per author.*

#### Other YAML fields:

| FIELD        | TYPE                | DESCRIPTION                                |
|--------------|---------------------|--|
| bibliography | <i>with default</i> | the BibTeX file with the reference entries |

---

rsos\_article      *Royal Society Open Science journal format.*

---

### Description

Format for creating submissions to Royal Society Open Science journals.

### Usage

```
rsos_article(
  ...,
  keep_tex = TRUE,
  latex_engine = "xelatex",
  pandoc_args = NULL,
  includes = NULL,
  fig_crop = TRUE
)
```

### Arguments

...      Additional arguments to `rmarkdown::pdf_document`

keep\_tex      Keep the intermediate tex file used in the conversion to PDF

|              |   |
|--------------|---|
| latex_engine | LaTeX engine for producing PDF output. Options are "pdflatex", "lualatex", and "xelatex".                                     |
| pandoc_args  | Additional command line options to pass to pandoc   |
| includes     | Named list of additional content to include within the document (typically created using the <code>includes</code> function). |
| fig_crop     | TRUE to automatically apply the pdfcrop utility (if available) to pdf figures   |

**Author(s)**

Thierry Onkelinx, <thierry.onkelinx@inbo.be>

---

rss\_article                      *Royal Statistical Society Journal Format*

---

**Description**

Format for creating articles for Royal Statistical Society adapted from <https://rss.org.uk/news-publication/publications/journals/submit-paper/>.

**Usage**

```
rss_article(..., keep_tex = TRUE, citation_package = "natbib")
```

**Arguments**

|                  |   |
|------------------|---|
| ...              | Arguments to <code>rmarkdown::pdf_document</code>   |
| keep_tex         | Keep the intermediate tex file used in the conversion to PDF  |
| citation_package | The LaTeX package to process citations, <code>natbib</code> or <code>biblatex</code> . Use default if neither package is to be used, which means citations will be processed via the command <code>pandoc-citeproc</code> . |

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