

A better way to format your document for Web of Conferences

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Abstract. A clear and well-documented L^AT_EX document is presented as an article formatted for publication by EDP Science in a Web of Conferences proceedings journals. Based on the “webofc” document class, this article presents and explains many of the common variations, as well as many of the formatting elements an author may use in the preparation of the documentation of their work. An article abstract should not normally exceed 200 words. This template don’t use any keywords.

1 On the T_EX

Already the third proceedings of the our conference is being prepared for publication in the Web of Conference series by EDP Science. Traditionally, we use L^AT_EX templates for the conference proceedings due to a lot of reasons, the main of them is the attempt to decrease an extra amount of editing efforts for the proceedings editors.

You can freely use any L^AT_EX compatible typesetting system (e.g., TeXstudio + TeX Live is a good choice for any operating systems), but if you don’t to be involved into the L^AT_EX system administration, we propose to use a cloud based L^AT_EX editors like Overleaf (<https://www.overleaf.com>). After registering at <https://www.overleaf.com>, you can start your paper revision with this template using ‘New Project’ – ‘Upload Project’ menu (figure 1).

The next step is to select the template archive – you can download it from the conference website (figure 2, figure 3).

To get a camera-ready version of your paper in PDF, you can click to ‘Download PDF’ icon or use ‘Menu’ to download both LaTeX source files (ZIP) and camera-ready version (PDF) (figure 4).

The most-often recommended tutorials are “The (Not So) Short Introduction to L^AT_EX2 ϵ ” (<https://www.ctan.org/tex-archive/info/lshort/>) and “Learn LaTeX in 30 minutes” (https://www.overleaf.com/learn/latex/Learn_LaTeX_in_30_minutes).

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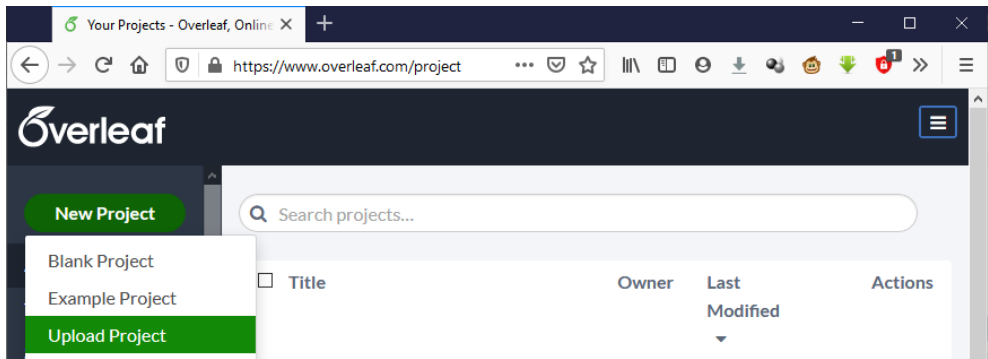


Figure 1. How to upload your project to Overleaf, part 1

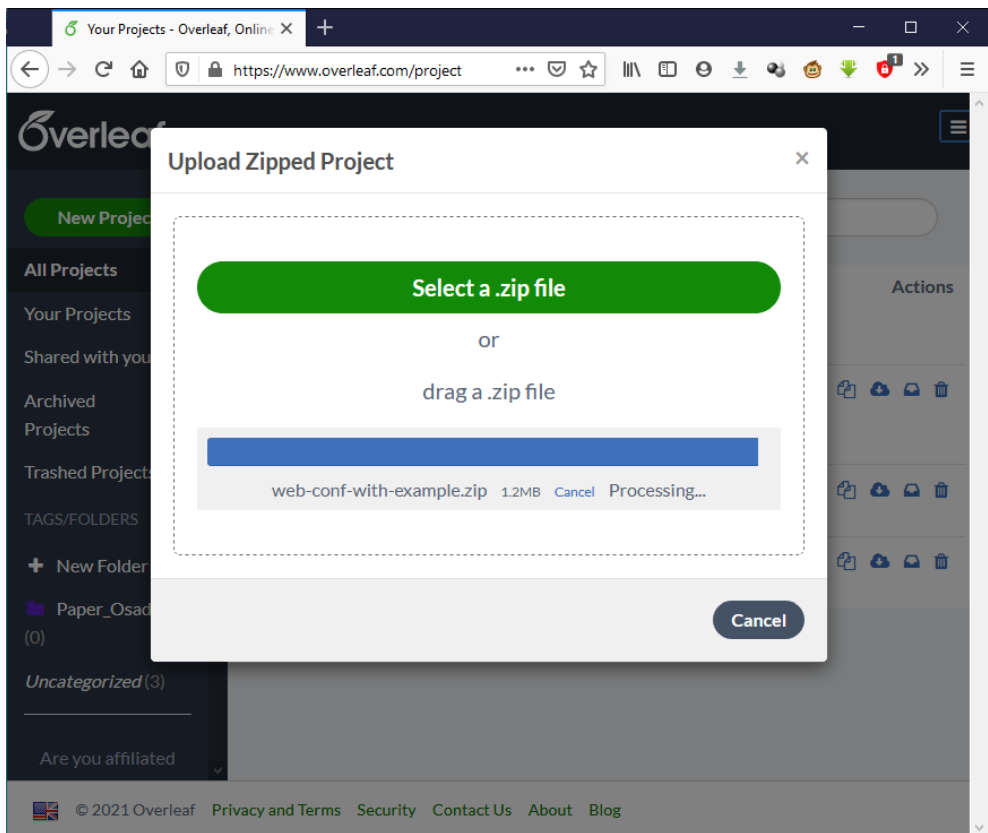


Figure 2. How to upload your project to Overleaf, part 2

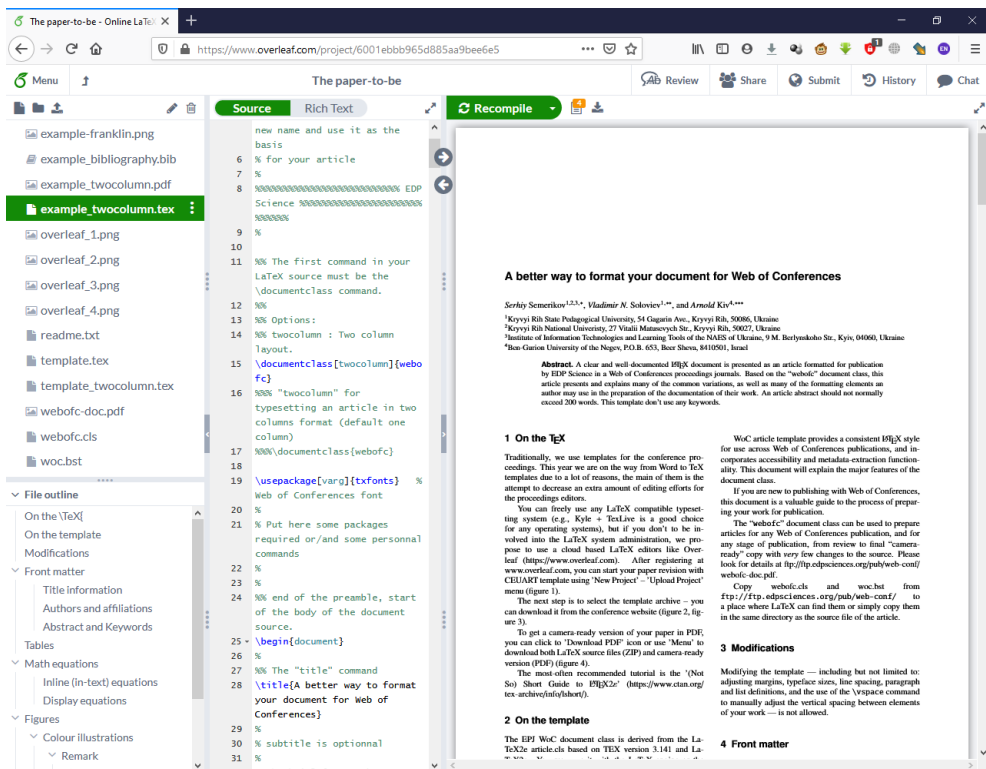


Figure 3. Overleaf, online \LaTeX editor

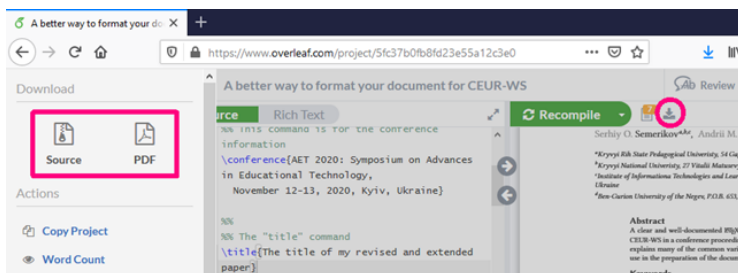


Figure 4. How to download your project from Overleaf

2 On the template

The EPJ WoC document class is derived from the $\text{\LaTeX}2\epsilon$ article.cls based on \TeX version 3.141 and $\text{\LaTeX}2\epsilon$. You may use it with the \LaTeX engine or the \PDF\LaTeX engine. Be sure that the \LaTeX version is at least the 2007 version.

WoC article template provides a consistent \LaTeX style for use across Web of Conferences publications, and incorporates accessibility and metadata-extraction functionality. This document will explain the major features of the document class.

If you are new to publishing with Web of Conferences, this document is a valuable guide to the process of preparing your work for publication.

The “webofc” document class can be used to prepare articles for any Web of Conferences publication, and for any stage of publication, from review to final “camera-ready” copy with *very* few changes to the source. Please look for details at <ftp://ftp.edpsciences.org/pub/web-conf/webofc-doc.pdf>.

Copy webofc.cls and woc.bst from <ftp://ftp.edpsciences.org/pub/web-conf/> to a place where LaTeX can find them or simply copy them in the same directory as the source file of the article.

3 Modifications

Modifying the template — including but not limited to: adjusting margins, typeface sizes, line spacing, paragraph and list definitions, and the use of the `\vspace` command to manually adjust the vertical spacing between elements of your work — is not allowed.

4 Front matter

4.1 Title information

The titles of papers should all use the regular English style. Use the `title` command to define the title of your work. Do not insert line breaks in your title.

```
\title{A better way to format your document  
for Web of Conferences}
```

4.2 Authors and affiliations

For the authors’ names type `\author{#1}`, where #1 is the list of all authors’ names. Each author must be defined with `\firstname` and `\lastname` for accurate metadata identification. Multiple authors may share one affiliation `\inst`.

The author names and affiliations could be formatted in two ways:

1. Group the authors per affiliation.
2. Use an explicit mark to indicate the affiliations.

Please ensure that affiliations are as full and complete as possible and include the department, institution, full postal address and postal index, and country. If the authors are at different addresses, numbered superscripts should be used after each surname to reference an author to his/her address. Multiple authors may share one affiliation.

Please also provide e-mail addresses for any or all of the authors using an `\fnsep\thanks{\email{#1}}` command after the `\inst`. Include authors’ e-mail addresses whenever possible. `\fnsep\thanks{\email{#1}}` provides the text “email:” at page footer.

The addresses of the authors’ affiliations follow the list of authors. All addresses should be set by using `\institute{#1}` with the address as the single parameter in braces.

Multiple authors and addresses are separated by `\and`.

```
\author{  
  \firstname{Serhiy} \lastname{Semerikov}  
  \inst{1,2,3,4}  
  \fnsep\thanks{\email{semerikov@gmail.com}}}
```

```

\and
  \firstname{Vladimir N.} \lastname{Soloviev}
  \inst{1}
\fnsep\thanks{\email{vnsoloviev2016@gmail.com}}
\and
  \firstname{Arnold} \lastname{Kiv} \inst{5}
  \fnsep\thanks{\email{kiv@bgu.ac.il}}
% etc.
}

\institute{
  Kryvyi Rih State Pedagogical University,
  54 Gagarin Ave., Kryvyi Rih, 50086, Ukraine
\and
  Kryvyi Rih National Univeristy,
  27 Vitalii Matusevych Str., Kryvyi Rih,
  50027, Ukraine
\and
  Institute of Information Technologies and
  Learning Tools of the NAES of Ukraine,
  9 M. Berlynskoho Str., Kyiv, 04060, Ukraine
\and
  University of Educational Management,
  52A Sichovykh Striltsiv Str., Kyiv, 04053,
  Ukraine
\and
  Ben-Gurion University of the Negev,
  P.O.B. 653, Beer Sheva, 8410501, Israel
}

```

4.3 Abstract and keywords

The abstract follows the addresses and should give readers concise information about the content of the article and should not normally exceed 200 words. **All articles must include an abstract.** To indicate the start of the abstract type `\begin{abstract}` followed by the text of the abstract. The abstract should normally be restricted to a single paragraph and is terminated by the command `\end{abstract}`

```

\begin{abstract}
This is an abstract.
\end{abstract}

```

Do not enter key words for this journal.

4.4 Sections and subsections

```

\section{This is the section title}
\subsection{This is the subsection title}
\label{subsection}

```

Cross references to other sections in the text should, where possible, be made using labels (see section 4.4) but can also be made manually.

```
\subsection{Sections and subsections
          \label{subsection}}
```

5 Tables

Tables should be numbered sequentially throughout the text and referred to in the text by number (table 1, etc, **rather than** tab. 1). Each table should be a float and be positioned within the text at the most convenient place near to where it is first mentioned in the text. It should have an explanatory caption which should be as concise as possible. Table captions are placed *above* the table.

Because tables cannot be split across pages, the best placement for them is typically the top of the page nearest their initial cite. To ensure this proper “floating” placement of tables, use the environment `table` to enclose the table’s contents and the table caption. The contents of the table itself must go in the `tabular` environment, to be aligned properly in rows and columns, with the desired horizontal and vertical rules.

Immediately following this sentence is the point at which table 1 is included in the input file; compare the placement of the table here with the table 2 in the printed output of this document.

Table 1. Please write your table caption here

first	second	third
number	number	number
number	number	number

The standard form for a table is:

```
\begin{table}[h]
\centering
\caption{Please write your
        table caption here}
\label{tab-1}          % Give a unique label
% For LaTeX tables you can use
\begin{tabular}{lll}
\hline
first & second & third \\ \hline
number & number & number \\
number & number & number \\ \hline
\end{tabular}
\end{table}
```

To set a wider table, which takes up the whole width of the page’s live area, use the environment `table*` to enclose the table’s contents and the table caption. As with a single-column table, this wide table will “float” to a location deemed more desirable. Immediately following this sentence is the point at which Table 3 is included in the input file; again, it is instructive to compare the placement of the table here with the table in the printed output of this document.

You can find a lot of examples at Overleaf documentation on tables (<https://www.overleaf.com/learn/latex/Tables>).

Table 2. Frequency of special characters

Non-English or Math	Frequency	Comments
Ø	1 in 1,000	For Swedish names
π	1 in 5	Common in math
\$	4 in 5	Used in business
Ψ^2_1	1 in 40,000	Unexplained usage

Table 3. Some typical commands

Command	A Number	Comments
<code>\author</code>	100	Author
<code>\table</code>	300	For tables
<code>\table*</code>	400	For wider tables (a very wide cell example)

6 Math equations

You may want to display math equations in three distinct styles: inline, numbered or non-numbered display. Each of the three are discussed in the next sections.

Equations may be numbered sequentially throughout the text (i.e., (1), (2), (3), ...) or numbered by section (i.e., (1.1), (1.2), (2.1), ...) depending on the author's personal preference. In articles with several appendices equation numbering by section is useful in the appendices even when sequential numbering has been used throughout the main body of the text: for example, A.1, A.2 and so forth. When referring to an equation in the text, always put the equation number in brackets – e.g. ‘as in equation (2)’ or ‘as in equation (2.1)’ – and always spell out the word ‘equation’ in full, e.g. ‘if equation (5) is factorized’; do not use abbreviations such as ‘eqn.’ or ‘eq.’.

6.1 Inline (in-text) equations

A formula that appears in the running text is called an inline or in-text formula. It is produced by the `math` environment, which can be invoked with the usual `\begin ... \end` construction or with the short form `$... $`. You can use any of the symbols and structures, from α to ω ; this section will simply show a few examples of in-text equations in context. Notice how this equation: $\lim_{n \rightarrow \infty} \frac{1}{n} = 0$, set here in in-line math style, looks slightly different when set in display style. (See next section).

6.2 Display equations

A numbered display equation—one set off by vertical space from the text and centered horizontally—is produced by the `equation` environment. An unnumbered display equation is produced by the `displaymath` environment.

Again, in either environment, you can use any of the symbols and structures available in \LaTeX ; this section will just give a couple of examples of display equations in context. First, consider the equation, shown as an inline equation above:

```
\begin{equation}
\lim_{n \rightarrow \infty} \frac{1}{n} = 0.
\end{equation}
```

$$\lim_{n \rightarrow \infty} \frac{1}{n} = 0. \quad (1)$$

Notice how it is formatted somewhat differently in the `displaymath` environment. Now, we'll enter an unnumbered equation:

```
\begin{displaymath}
  S_{\{n\}} = \sum_{i=1}^n x_{\{i\}} ,
\end{displaymath}
```

$$S_n = \sum_{i=1}^n x_i,$$

and follow it with another numbered equation:

```
\begin{equation}\label{lim}
  \lim_{x \rightarrow 0} (1 + x)^{1/x} = e
\end{equation}
```

$$\lim_{x \rightarrow 0} (1 + x)^{1/x} = e \quad (2)$$

just to demonstrate L^AT_EX's able handling of numbering.

Usually, equations should be centred and should be numbered with the number on the right-hand side. (You can find an additional examples of alignment at Overleaf documentation on aligning equations with `amsmath` – https://www.overleaf.com/learn/latex/Aligning_equations_with_amsmath).

Using `\label{equation}` you can refer to corresponding equation by number – e.g., equation (2).

7 Figures

The “figure” environment should be used for figures. One or more images can be placed within a figure. Figures must be included in the source code of an article at the appropriate place in the text not grouped together at the end.

Your figures should contain a caption which describes the figure to the reader (see figure 5). Figure captions go below the figure. Your figures should also include a description suitable for screen readers, to assist the visually-challenged to better understand your work.

For one-column wide figures with fixed position in text use syntax of figure 5:

```
\begin{figure}[h]
  \centering
  \includegraphics[width=\linewidth]
    {img/example-franklin}
  \caption{1907 Franklin Model D roadster}
  \label{fig-0}
\end{figure}
```

For figure with sidecaption legend use syntax of figure 6. A sidecaption is a rare case of a figure caption: use it with caution.

```
\begin{figure}[h]
  \centering
  \sidecaption
  \includegraphics[width=4cm,clip]
```




Figure 5. 1907 Franklin Model D roadster

```
{img/example-franklin}
\caption{Please write your
figure sidecaption here}
\label{fig-3}
\end{figure}
```



Figure 6. Please write your figure sidecaption here

For two-column wide figures use syntax of figure 7:

```
\begin{figure*}
\centering
\includegraphics[width=\linewidth]
{img/example-franklin}
\caption{Please write your
```



Figure 7. Please write your figure caption here

```
        figure caption here}
\label{fig-2}
\end{figure*}
```

7.1 Colour illustrations

You are free to use colour illustrations for the online version of the proceedings.

7.1.1 *Remark*

Use over 300 dpi resolution for your figures (we prefer 600 dpi).

One more remark

Don't use the lossy compressed images (e.g., JPEG).

7.2 Floats

The environments `figure` and `table` have also been modified to adapt to the typographical demands of the journal. The underlying syntax remains the same, meaning that these environments have no obligatory argument, although they may have an optional argument indicating the positioning requirements and making it possible to have a legend using `\caption`

and there are also asterisk forms so that these floats take up two columns. The differences are related to the configuration of these floats. For the floating figures, `\caption` should be specified following the image, whereas for the floating tables, this command should be entered before the environment which is used to typeset the table itself. In fact, the review stipulates that the legends follow the figures and come before the tables.

8 Citations and bibliographies

As part of the production system for Web of Conferences, online versions of all reference lists will, wherever possible, be linked electronically using CrossRef. **It is *vital*ly important for all the references to be accurate and to be carefully formatted using the guidelines below, otherwise delays may be incurred and the references may not link through CrossRef.**

References should be cited in the text by placing sequential numbers in brackets (for example, [1], [2, 5, 7], [8-10]). They should be numbered in the order in which they are cited. A complete reference should provide enough information to locate the article. References to printed journal articles should typically contain:

- The authors, in the form: initials of the first names followed by last name (only the first letter capitalized with full stops after the initials),
- The journal title (abbreviated),
- The volume number (bold type),
- The article number or the page numbers,
- The year of publication (in brackets).

Book title or proceedings title, if any, should be in italic.

If an author is unsure of a particular journal's abbreviated title it is best to leave the title in full. The terms *loc. cit.* and *ibid.* should not be used.

Unpublished conferences and reports should generally not be included in the reference list and articles in the course of publication should be entered only if the journal of publication is known.

A thesis submitted for a higher degree may be included in the reference list if it has not been superseded by a published paper and is available through a library; sufficient information should be given for it to be traced readily.

8.1 Formatting reference lists

The use of Bib \TeX for the preparation and formatting of one's references is **mandatory**.

The bibliography is included in your source document with this command, placed just before the `\end{document}` command:

```
\bibliography{bibfile}
```

where “bibfile” is the name, without the “.bib” suffix, of the Bib \TeX file.

9 Bibliographic data fields

9.1 References to printed journal articles

A normal reference to a journal article is constructed as follows:

```
@article{Osadchyi2017133,
  author={Osadchyi, V. and Osadcha, K.
    and Ereemeev, V.},
  title={The model of the intelligence system
    for the analysis of qualifications
    frameworks of {European} countries},
  journal={International Journal of Computing},
  year={2017},
  volume={16},
  number={3},
  pages={133-142},
  url={https://doi.org/10.47839/ijc.16.3.896}
}
```

9.2 References to Web of Conferences articles

Each conference proceeding published in Web of Conferences series will be a separate *volume*; references should follow the style for conventional printed journals. For example:

```
@article{refId0,
  author = {Hamaniuk, Vita and Semerikov, Serhiy
    and Shramko, Yaroslav},
  title = {{HTML} 2020 -- How learning
    technology wins coronavirus},
  DOI="10.1051/shsconf/20207500001",
  url=
    {https://doi.org/10.1051/shsconf/20207500001},
  journal = {SHS Web Conf.},
  year = 2020,
  volume = 75,
  pages = "00001",
}
```

9.3 References to books, conference proceedings and reports

References to books, proceedings and reports are similar to journal references:

- Complete book

```
@book{Morkun,
  author = {Vladimir Morkun and Serhiy Semerikov
    and Svitlana Hryshchenko},
  title = {Methods of Using Geoinformation
    Technologies in Mining
    Engineers' Training},
  year = {2018},
  publisher = {Cambridge Scholars Publishing},
  address = {Newcastle upon Tyne},
}
```

- Book in series

```
@book{Dirac:1958,
author = {P. A. M. Dirac},
title = {The Principles of Quantum Mechanics},
series = {The International Series
          of Monographs on Physics},
number = {27},
edition = {4},
publisher = {Clarendon Press},
address = {Oxford},
year = {1967}
}
```

- Book chapter or some part of book

```
@inbook{Nikiforov_Novikov_Uvarov2005:ch1,
author = {Nikiforov, A. F. and Novikov, V. G.
          and Uvarov, V. B.},
title = {Quantum-Statistical Models
          of Hot Dense Matter},
publisher = {Birkh\"{a}user Verlag},
address = {Basel},
year = {2005},
chapter = {1},
pages = {3--28}
}
```

(You can also cite any part of book using `\cite[pp 110--3]{Dirac:1958}` or `\cite[chapter 4, pp 98--105]{Dirac:1958}`)

- Authored chapter

```
@incollection{Morse:1996,
author = {M. Morse},
title = {Supersonic beam sources},
booktitle = {Atomic Molecular
             and Optical Physics},
editor = {F. B. Dunning and R. Hulet},
series = {Experimental Methods
          in the Physical Sciences},
volume = {29},
publisher = {Academic},
address = {San Diego},
year = {1996}
}
```

- Article in conference proceedings

```
@incollection{Tkachuk2021,
author="Tkachuk, Viktoriia and
       Yechkalo, Yuliia and Semerikov, Serhiy
       and Kislova, Maria and Hladyr, Yana",
editor="Bollin, Andreas and Ermolayev, Vadim
and Mayr, Heinrich C. and Nikitchenko, Mykola
```

```

and Spivakovsky, Aleksander and Tkachuk, Mykola
and Yakovyna, Vitaliy and Zholtkevych, Grygoriy",
title="{Using Mobile ICT for Online
      Learning During COVID-19 Lockdown}",
doi={10.1007/978-3-030-77592-6_3},
url=
{https://doi.org/10.1007/978-3-030-77592-6_3},
booktitle="Information and Communication
Technologies in Education, Research,
and Industrial Applications",
year="2021",
publisher="Springer International Publishing",
address="Cham",
pages="46--67",
isbn="978-3-030-77592-6"
}

```

or @CONFERENCE or @inproceedings.

9.4 A case of non-Latin source

When non-Latin alphabet publication cited in an English publication, the title of the publication (e.g., book or article) in the original language need to be both transliterated and translated in English. Other bibliographic components (including authors, publisher, address and journal name) are transliterated only [1]:

```

@article{IA2000,
author = {Semerikov, S. O. and Soloviov, V. M.
and Teplytskyi, I. O.},
year=2000,
title= {Instrumentalne zabezpechennia kursu
kompiuternoho modeliuвання ({I}nstrumental
support of the course of computer modeling)},
journal= {Kompiuter u shkoli i simi},
number=4,
pages={28-31},
url={https://lib.iitta.gov.ua/704129/}
}

```

9.5 Best practices: export citations into a BibTeX file

A good way to make your bibliography is to exclude manual creation bibliography items whenever it possible. We strongly recommend to use the “Cite” (export) facilities to BibTeX which available in the most of OJS installations (figure 8a), ACM Digital Library (figure 8b), Scopus (figure 8c), IEEE Xplore (figure 8d), ScienceDirect (figure 8e), Web of Science (figure 8f) etc.

9.6 Some examples

A paginated journal article [2], an enumerated journal article [3, 4], a monograph (whole book) [5], a monograph/whole book in a series [6], a divisible-book such as an anthology

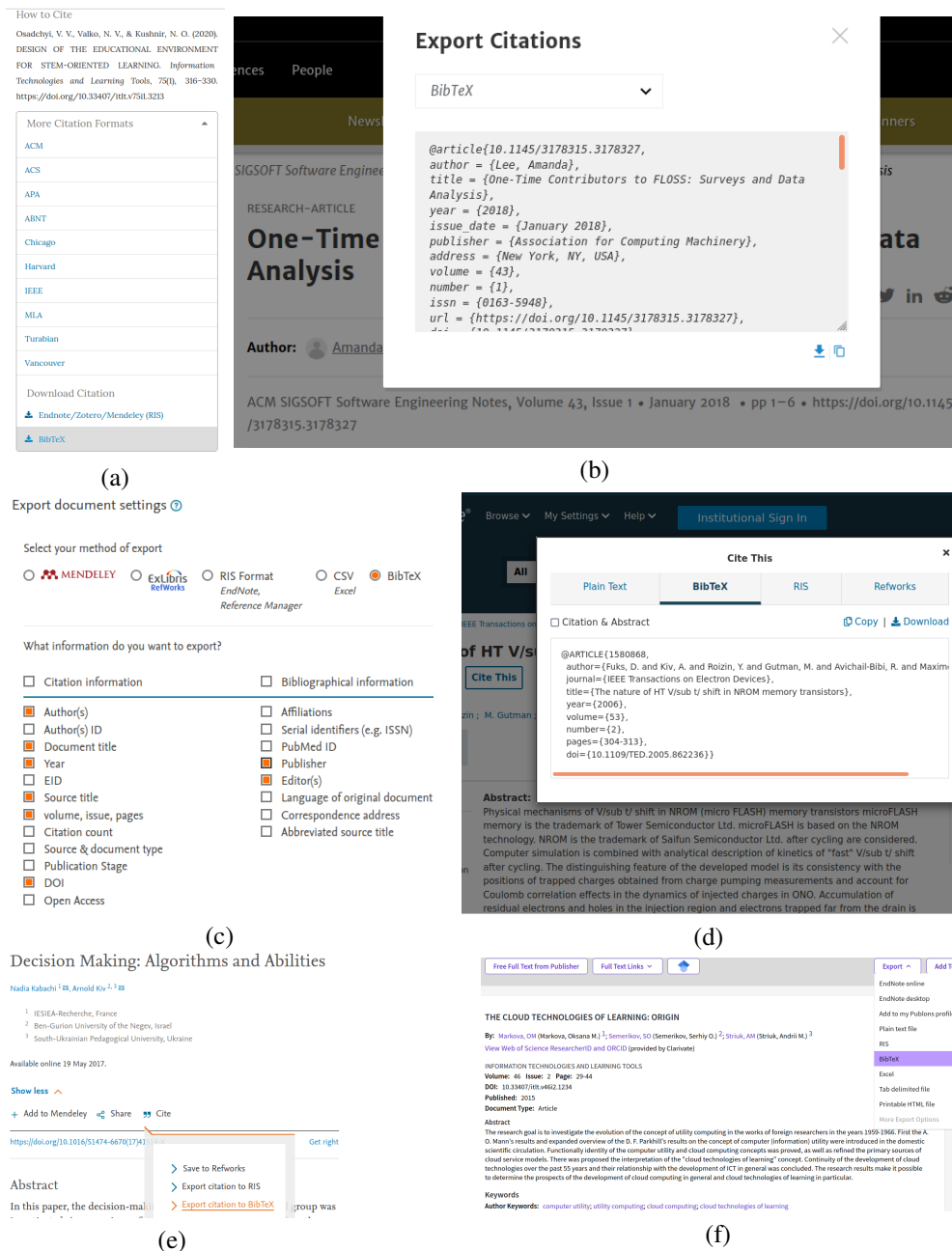


Figure 8. Export citations into a BibTeX file.

or compilation [7] followed by the same example, however we only output the series if the volume number is given [8] (so series should not be present since it has no volume number), a chapter in a divisible book [9], a chapter in a divisible book in a series [10], a multi-volume work as book [11], an article in a proceedings (of a conference, symposium, workshop for example) (paginated proceedings article) [12], a proceedings article with all possible elements

[13], an example of an enumerated proceedings article [14], an informally published work [15], a doctoral dissertation [16], a master's thesis: [17], an online document / world wide web resource [18–20], a video game (Case 1) [21] and (Case 2) [22] and [23] and (Case 3) a patent [24], work accepted for publication [25]. Multi-volume works as books [26] and [27]. A couple of citations with DOIs: [28, 29]. Online citations: [18, 30–32].

A lot of citations can be joined by adding the `\usepackage{cite}` to document preamble: [33–60].

The acknowledgments, if any, should be typed without title. Identification of funding sources and other support, and thanks to individuals and groups that assisted in the research and the preparation of the work should be included in this section, which is placed just before the reference section in your document.

```
\begin{acknowledgement}
```

```
We acknowledge Covidpocalypse 2019 for making the  
long-awaited completion of this paper possible.
```

```
\end{acknowledgement}
```

References

- [1] S.O. Semerikov, V.M. Soloviov, I.O. Teplytskyi, Instrumentalne zabezpechennia kursu kompiuternoho modeliuвання (Instrumental support of the course of computer modeling), *Kompiuter u shkoli i simi* pp. 28–31 (2000).
- [2] A.E. Kiv, V.N. Soloviev, The grasshopper effect in the diamond lattice, *physica status solidi (b)* **94**, K91 (1979). [10.1002/pssb.2220940160](https://doi.org/10.1002/pssb.2220940160)
- [3] T. Kavetsky, M. Alipour, O. Smutok, O. Mushynska, A. Kiv, D. Fink, F. Farshchi, E. Ahmadian, M. Hasanzadeh, Magneto-immunoassay of cancer biomarkers: Recent progress and challenges in biomedical analysis, *Microchemical Journal* **167**, 106320 (2021). [10.1016/j.microc.2021.106320](https://doi.org/10.1016/j.microc.2021.106320)
- [4] V. Hamaniuk, S. Semerikov, Y. Shramko, ICHTML 2020 – How learning technology wins coronavirus, *SHS Web Conf.* **75**, 00001 (2020). [10.1051/shsconf/20207500001](https://doi.org/10.1051/shsconf/20207500001)
- [5] V. Morkun, S. Semerikov, S. Hryshchenko, *Methods of Using Geoinformation Technologies in Mining Engineers' Training* (Cambridge Scholars Publishing, Newcastle upon Tyne, 2018)
- [6] D. Harel, *First-Order Dynamic Logic*, Vol. 68 of *Lecture Notes in Computer Science* (Springer-Verlag, New York, NY, 1979)
- [7] I. Editor, ed., *The title of book one* (University of Chicago Press, Chicago, 2007), Vol. 9 of *The name of the series one*, 1st edn.
- [8] I. Editor, ed., *The title of book two* (University of Chicago Press, Chicago, 2008), chap. 100, *The name of the series two*, 2nd edn.
- [9] A.Z. Spector, in *Distributed Systems*, edited by S. Mullender (ACM Press, New York, NY, 1990), pp. 19–33, 2nd edn.
- [10] B.P. Douglass, D. Harel, M.B. Trakhtenbrot, in *Lectures on Embedded Systems*, edited by G. Rozenberg, F.W. Vaandrager (Springer-Verlag, London, 1998), Vol. 1494 of *Lecture Notes in Computer Science*, pp. 368–394
- [11] D.E. Knuth, *The Art of Computer Programming*, Vol. 1: *Fundamental Algorithms* (3rd. ed.) (Addison Wesley Longman Publishing Co., Inc., 1997)
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