References / Citations



COMP 690A/B Research Methods in CS Dr. Lourdes Peña-Castillo Editor:

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• Intro to Referencing by Leeds University (2')

Library, University of Leeds. https://library.leeds.ac.uk/info/1402/referencing/47/referencing_explained

Why citing and referencing?



- Prove you know the field
 - assure readers your work is valid
 - demonstrate the breadth and depth of your research
- Acknowledge your sources and allow others to locate them
- Give credit to other people's work
- Put your work in context
- Maintain Academic Integrity and avoid plagiarism
 - Always use a reference whenever you use someone else's ideas, figures, words, findings, etc.

Terminology



- In-text citation
 - A marker in the body of the work (text) acknowledging a source.
- References
 - A list at the end of the document containing the details of the sources cited.
- Bibliography
 - A list of the sources cited plus sources consulted (i.e., they do not appear in an in-text citation)
- Referencing style (system)
 - Format used to include in-text citations and list of references; i.e., how they appear in the body of the work, how references are ordered.
 - There are many styles used in academic writing
 - RULE: One reference style per document.
 - Be consistent! There is no mix-and-matching styles in a single document

Types of referencing/citation styles



- Parenthetical
- Numbered
- Footnote
- Narrative

Types of referencing styles



Parenthetical

- In-text citations show the author's surname(s) and the date of publication between round brackets.
- References are in alphabetical order by author surname.
- Examples:
 - APA (American Psychological Association), as in: (Jerrentrup et al., 2018) or Jerrentrup et al. (2018)
 - Chicago Author-Date, as in: (Einstein 1923, 44–45)
 - Harvard, as in (Shah and Papadopoulos, 2015) Quick guide to Harvard referencing

How to refer/cite?



1. In-text citation

Bacterial small RNAs (sRNAs) are ubiquitous regulators of gene expression, mostly acting by antisense mechanisms on multiple target mRNAs and, as a result of this, they are involved in the control of many processes such as adaptive responses, stress responses, virulence, and pathogenicity (*Storz, Vogel & Wassarman, 2011*; *Michaux et al., 2014*). Numerous

2. Reference

Storz G, Vogel J, Wassarman KM. 2011. Regulation by small RNAs in bacteria: expanding frontiers. *Molecular Cell* 43(6):880–891 DOI 10.1016/j.molcel.2011.08.022.

Types of referencing styles



Numbered

- In-text citations are numbers between brackets (usually square brackets). Sources are numbered in the order they are cited in the text.
- References are in a numerically ordered list.
- Examples:
 - BioMed Central
 - IEEE (Institute of Electrical and Electronic Engineers)
 - ACM
 - Vancouver

How to refer/cite?



1. In-text citations

mentary Table 1). Cassiano and Silva-Rocha [20] carried out a comparative assessment of bacterial promoter prediction tools for identifying $E.\ coli\ \sigma^{70}$ promoters. In their benchmark, their found that iPro70-FMWin [6] achieved the best results in terms of accuracy and MCC.

2.References

- Rahman, M.S., Aktar, U., Jani, M.R., Shatabda, S.: iPro70-FMWin: identifying sigma70 promoters using multiple windowing and minimal features. Molecular Genetics and Genomics, 1–16 (2018)
- Wang, S., Cheng, X., Li, Y., Wu, M., Zhao, Y.: Image-based promoter prediction: a promoter prediction method based on evolutionarily generated patterns. Scientific reports 8(1), 1–9 (2018)
- Liu, B., Yang, F., Huang, D.-S., Chou, K.-C.: iPromoter-2L: a two-layer predictor for identifying promoters and their types by multi-window-based PseKNC. Bioinformatics 34(1), 33–40 (2018). doi:10.1093/bioinformatics/btx579

- Rangannan, V., Bansal, M.: Relative stability of DNA as a generic criterion for promoter prediction: whole genome annotation of microbial genomes with varying nucleotide base composition. Molecular bioSystems 5(12), 1758–1769 (2009)
- Liu, B., Yang, F., Huang, D.-S., Chou, K.-C.: iPromoter-2L: a two-layer predictor for identifying promoters and their types by multi-window-based pseknc. Bioinformatics 34(1), 33–40 (2018)
- Cassiano, M.H.A., Silva-Rocha, R.: Benchmarking bacterial promoter prediction tools: Potentialities and limitations. mSystems 5(4) (2020). doi:10.1128/mSystems.00439-20.

Types of referencing styles



Footnote

- In-text citations are superscripted numbers. Sometimes citations details are provided at the bottom of each page.
- References are either alphabetical ordered by author surname or numerically ordered.
- Examples:
 - Chicago Footnote
 - Australian Guide to Legal Citation

How to refer/cite?



1. In-text citations

two strains. Based on significant matches to sequences in the Rfam database. ¹² in the RNAcentral database. ¹³ and in the bacterial small regulatory RNA database (BSRD), ¹⁴ 19 of the 422 putative sRNAs were assigned a predicted function. The transcript levels for selected sRNA candidates were validated by Northern blot analysis.

2.References

 Burge SW, Daub J, Eberhardt R, Tate J, Barquist L, Nawrocki EP, Eddy SR, Gardner PP, Bateman A. Rfam 11.0: 10 years of RNA families. Nucleic Acids Res 2013; 41:D226-32; PMID:23125362; http://dx.doi.org/10.1093/nar/gks1005

When to cite?



- Did you know this without having to look it up somewhere?
 - No ----> CITE!
- Are the data, images, tables, etc your own work?
 - No ----> CITE!
- Are these ideas your own ideas?
 - No ----> CITE!
- Is this common knowledge?
 - No ---> CITE!
 - If something would be known by any reasonably informed person then it is common knowledge (e.g., Canada is in North America.).
 - If something is known by anyone in a field of study (appears in textbooks) then it is discipline specific common knowledge (e.g., An if-else statement requires a Boolean expression.)

Elements of a Reference



- Author, Title, Source/Publisher, Date (just to start)
- Others may include: Volume, Issue, URL, DOI, etc.
- The Basics of Citing and Referencing in APA 7th Edition by Smart Student (6'54")
 - Learn citing and referencing by Monash University

Reference Management Software



Software that facilitates:

- collecting references
- storing and organising references
- inserting in-text citations in a document
- generating a reference list or bibliography at the end of the document
- formatting references in a required referencing style

• Examples:

EndNote, Zotero, RefWorks, JabRef, BibDesk, Mendeley

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• For this course, you need to use a Reference Manager Software that supports BibTeX as you have to write your literature survey & research proposal using LaTeX.

 I use BibDesk and I will show examples of BibDesk's functionality, but you can use a different reference manager if you want.

BibTeX



- Text-based file format to describe bibliography items
- Tool to process list of references in LaTeX documents

Sample BibTeX entry:

```
@misc{ Nobody06,
    author = "Nobody Jr",
    title = "My Article",
    year = "2006" }
```



Create your LaTeX-File

BibTeX entry key is used to include in-text citations

```
\documentclass[11pt]{article}
\usepackage{cite}
\begin{document}
\title{My Article}
\author{Nobody Jr.}
\date{Today}
\maketitle
Blablabla said Nobody \cite{Nobody06}.
\bibliography{mybib}{}
\bibliographystyle{plain}
\end{document}
```

```
@misc{ Nobody06,
            author = "Nobody Jr",
            title = "My Article",
            year = "2006" }
```



Create your LaTeX-File

```
\documentclass[11pt]{article}
\usepackage{cite}
\begin{document}
\title{My Article}
\author{Nobody Jr.}
\date{Today}
\maketitle
Blablabla said Nobody ~\cite{Nobody06}.
                                       Assume BibTex file is called mybib.bib
\bibliography{mybib}{}
                                       then you can just indicate it in your
\bibliographystyle{plain}
\end{document}
                                       LaTeX file
```

```
@misc{ Nobody06,
        author = "Nobody Jr",
        title = "My Article",
        year = "2006" }
```



Create your LaTeX-File

```
\documentclass[11pt]{article}
\usepackage{cite}
\begin{document}
\title{My Article}
\author{Nobody Jr.}
\date{Today}
\maketitle
Blablabla said Nobody ~\cite{Nobody06}.
                                       Under style you may have
\bibliography{mybib}{}
                                         apa7, acm, ieee, etc.
\bibliographystyle{plain}
\end{document}
```

Compile & ready

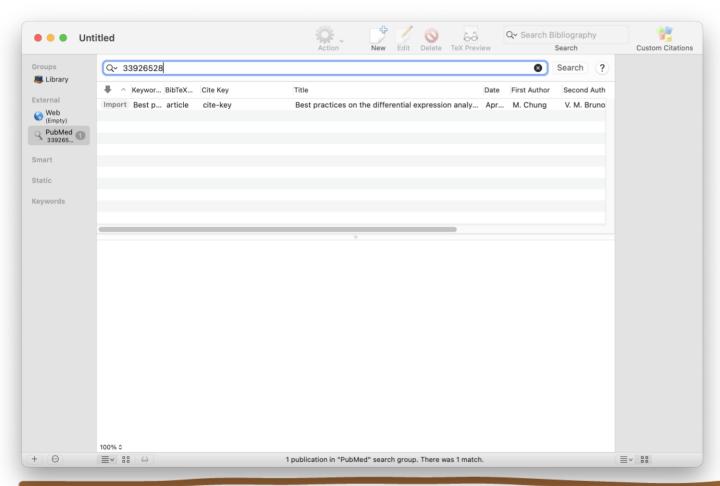


```
$ latex myarticle
$ bibtex myarticle
$ latex myarticle
$ latex myarticle
$ latex myarticle
```

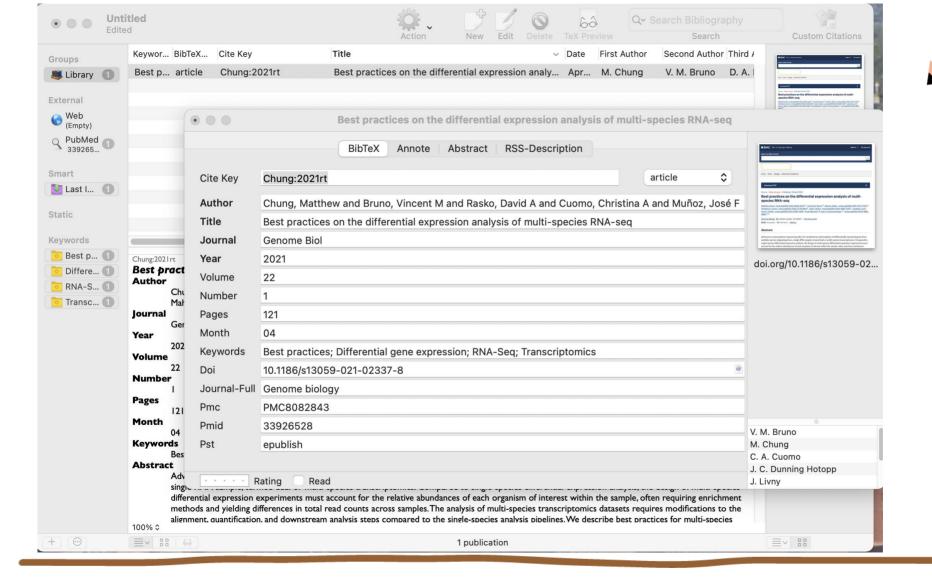
However, you should almost never have to type references by hand!

Getting them directly from a literature database



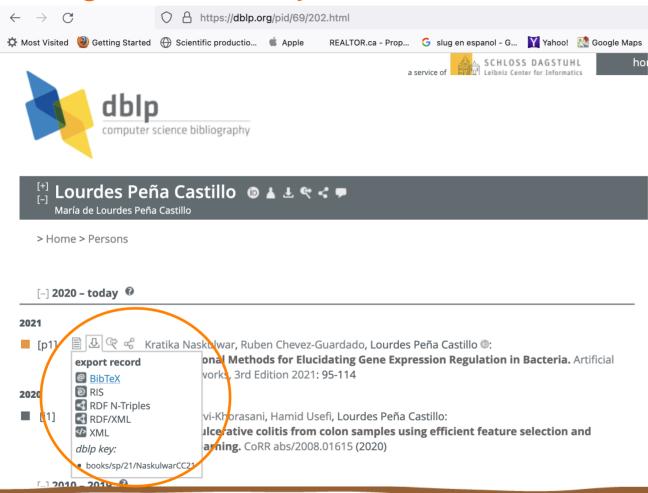


Most reference managers allow you to search literature databases and automatically retrieve and import references.



Getting them directly from a literature database





Getting citation directly from journals



Research | Open Access | Published: 27 September 2021

Biologically relevant transfer learning improves transcription factor binding prediction

Gherman Novakovsky, Manu Saraswat, Oriol Fornes □, Sara Mostafavi & Wyeth W. Wasserman □

Genome Biology 22, Article number: 280 (2021) (Cite this article)

Review Article | Published: 02 August 2021

Decoding disease: from genomes to networks to phenotypes

Aaron K. Wong, Rachel S. G. Sealfon, Chandra L. Theesfeld & Olga G. Troyanskaya

Nature Reviews Genetics (2021) Cite this article

Getting citation directly from journals



Cite this article

Wong, A.K., Sealfon, R.S.G., Theesfeld, C.L. et al. Decoding disease: from genomes

to networks to phenotypes. Nat Rev Genet (2021). https://

/s41576-021-00389-x

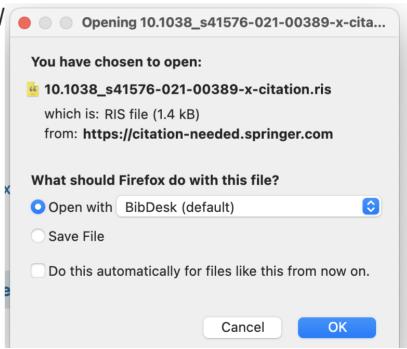
Download citation **⊻**

Accepted Published

18 June 2021 02 August 2021

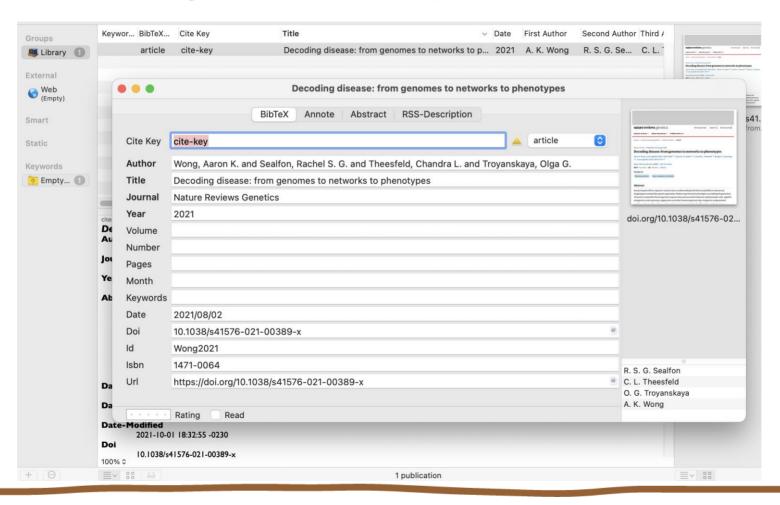
DOI

https://doi.org/10.1038/s41576-021-00389-x



Getting citation directly from journals





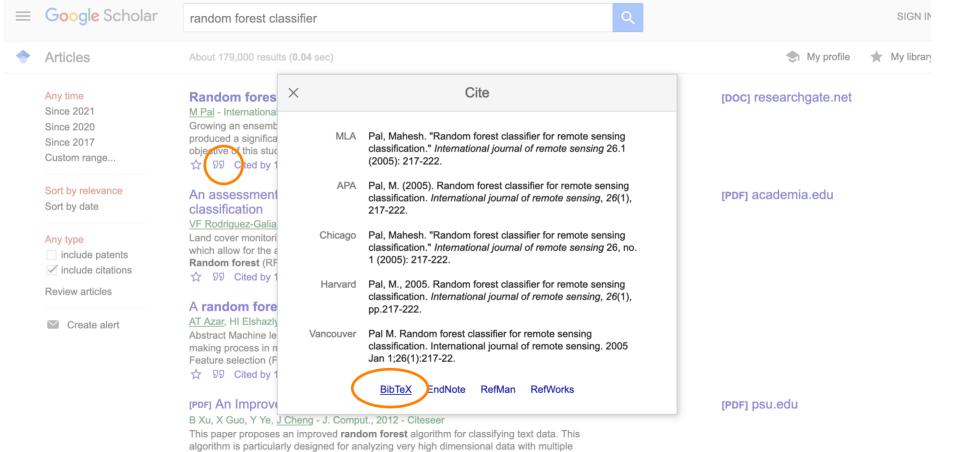
Getting citation directly from preprint repositories



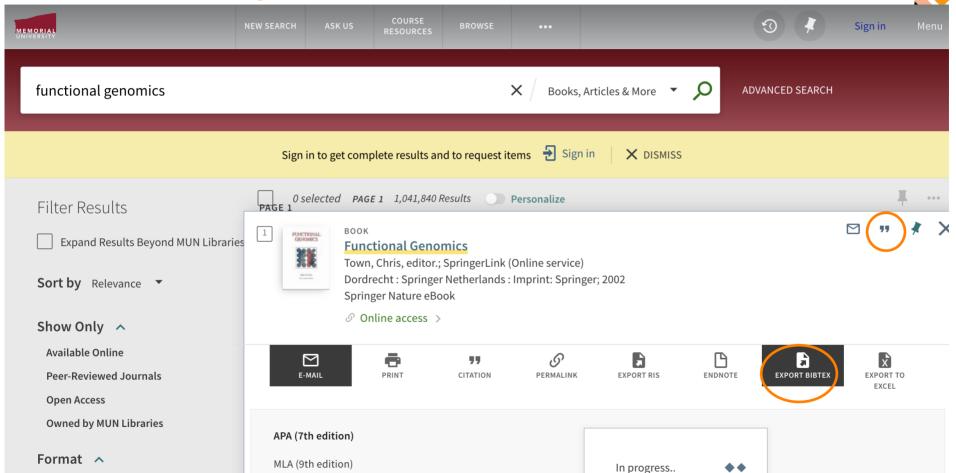
All fields Search... Searcl arXiv.org > stat > arXiv:1606.05908 Help | Advanced Search Statistics > Machine Learning **Download:** [Submitted on 19 Jun 2016 (v1), last revised 3 Jan 2021 (this version, v3)] PDF **Tutorial on Variational Autoencoders** Other formats (license) Carl Doersch Current browse context: stat.ML In just three years, Variational Autoencoders (VAEs) have emerged as one of the most popular approaches to unsupervised learning of < prev next > new | recent | 1606 complicated distributions. VAEs are appealing because they are built on top of standard function approximators (neural networks), and can be trained with stochastic gradient descent. VAEs have already shown promise in generating many kinds of complicated data, including Change to browse by: handwritten digits, faces, house numbers, CIFAR images, physical models of scenes, segmentation, and predicting the future from static CS cs.LG images. This tutorial introduces the intuitions behind VAEs, explains the mathematics behind them, and describes some empirical behavior. stat No prior knowledge of variational Bayesian methods is assumed. **References & Citations** Subjects: Machine Learning (stat.ML); Machine Learning (cs.LG) NASA ADS • Google Scholar arXiv:1606.05908 [stat.ML] Semantic Scholar (or arXiv:1606.05908v3 [stat.ML] for this version) 6 blog links (what is this?) Submission history **Export Bibtex Citation** From: Carl Doersch [view email]

Getting citation directly from Google Scholar



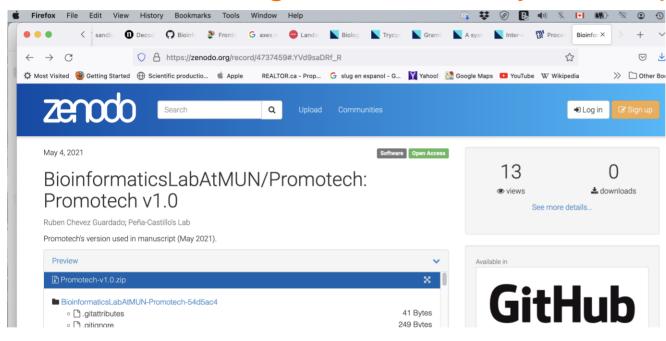


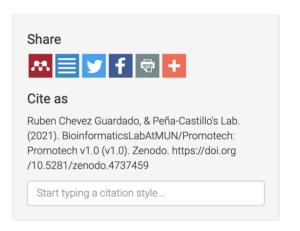
Getting citation directly from MUN library



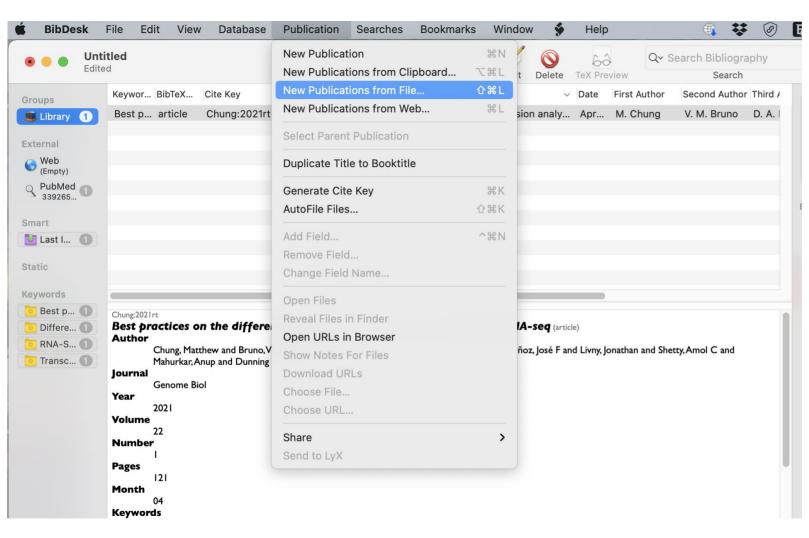
Getting citation directly from repositories











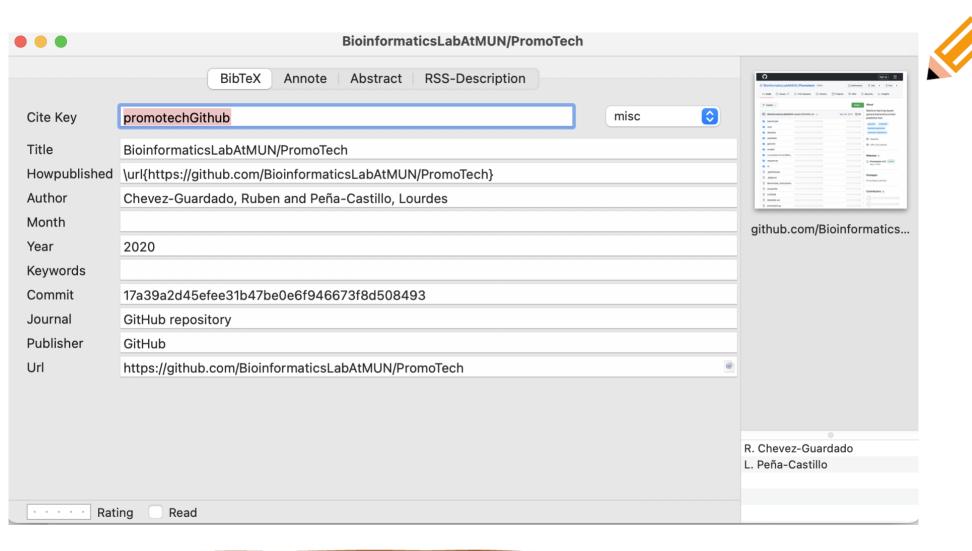


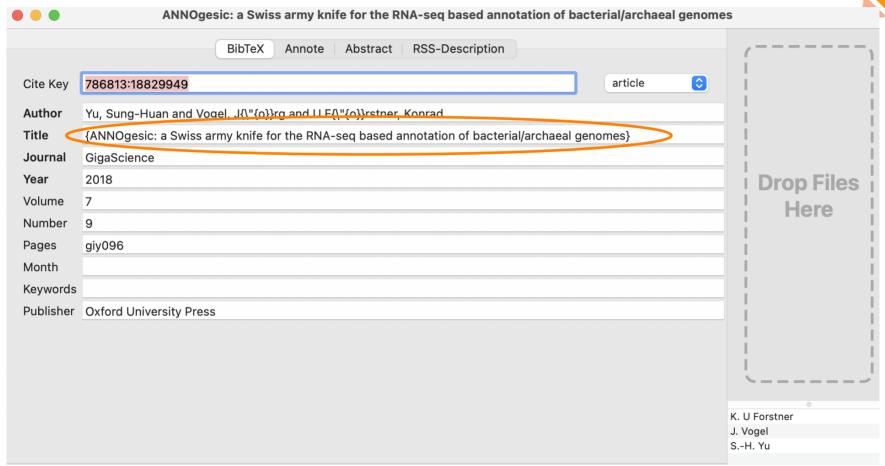
Most reference managers allow you to import references from a file.

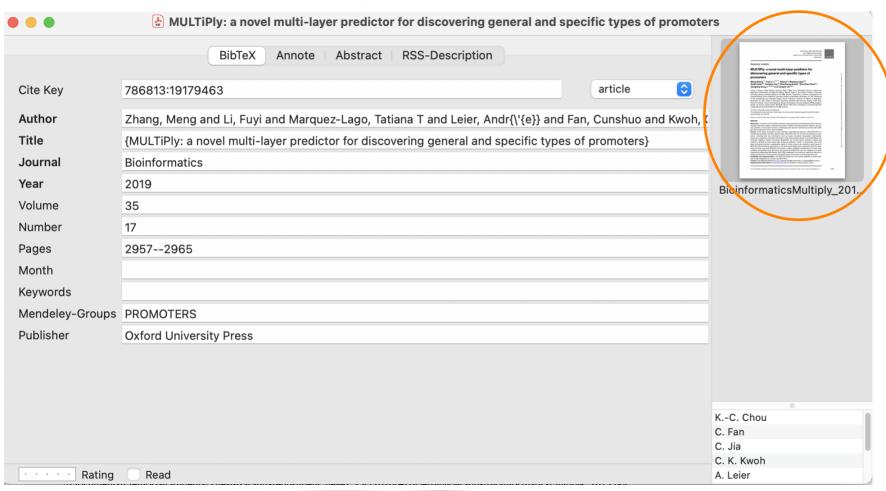
Entries you might need to type by hand...



- Web pages
- News articles
- Blogs
- ...









	BibTeX Annote Abstract RSS-Description
Cite Key	Grull:2017zr article
Author	\textbf{Grid, Marc P} and Peña-Castillo, Lourdes and Mulligan, Martin E and Lang, Andrew S
Title	Genome-wide identification and characterization of small {RNAs} (n \textit{R}) odobacter capsulatus} and identification of small
Journal	RNA Biol
Year	2017
Volume	14
Number	7
Pages	914-925
Month	Jul
Keywords	CtrA; RNA-seq; Rhodobacter capsulatus; logistic regression; sRNA-Detect; small non-coding RNAs
Doi	10.1080/15476286.2017.1306175
Journal-Full	RNA biology
Mesh	Bacterial Proteins; Base Sequence; Computational Biology; Gene Expression Regulation, Bacterial; Genetic Loci; Genome, Bac
Pmc	PMC5546546
Pmid	28296577
Pst	ppublish



	BibTeX Annote Abstract RSS-Description	
Cite Key	Li2014 article	©
Author	Li, Xinghua and Liang. Weijiang and Liu, Junling and Lin, Chuyong and Wu, Shu and Song, Libing and Yuan, Zhongyu	
Title	Transducii (\textbeta)-lke 1 {X}-linked receptor 1 promotes proliferation and tumorigenicity in human breast cancer via	activa
Journal	Breast Cancer Res	
Year	2014	
Volume	16	
Number	5	
Pages	465	
Month		
Keywords		
Doi	10.1186/s13058-014-0465-z	@
Journal-Full	Breast cancer research : BCR	
Pmc	PMC4303137	
Pmid	25341494	
Pst	epublish	

References Checklist



- Comprehensive (not exhaustive)
- Relevant to the topic
- Consulted by you
- Non-redundant
- Accurate
- Appropriate sources



- Activity: <u>Ten simple rules for responsible</u> referencing, <u>Bart Penders</u>
 - (Also available in Brightspace)

By now, you should be able to ...



- explain why we cite sources
- know when to cite something and how to cite it
- explain referencing styles
- understand how BibTeX works
- appreciate the importance of using reference management software
- import BibTex entries from a variety of sources to a reference manager
- add italics/bold letters, greek letters, special characters to BibTeX entries
- follow rules for appropriate referencing

Homework: Check out these Online Resources



- Quick guide to Harvard referencing by The Open University
- Harvard Referencing Made Easy | Simple Harvard Referencing Tutorial by Dr Hayley Stainton (16'12")
- The Basics of Citing and Referencing in APA 7th Edition by Smart Student (6'54")
- http://www.bibtex.org/Using by Alexander Feder