MIAE PhD Library Seminar

Fall 2019

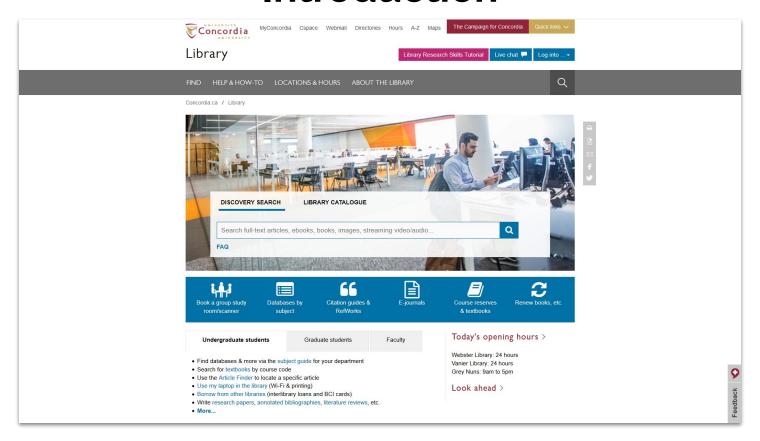
Tim Walsh (Librarian for MIAE & CSSE)

tim.walsh@concordia.ca

Today

- Introduction
- The literature review
- Literature search tools
 - Databases
 - Zotero
- Search strategies
- Accessing articles, books, and other resources
- Citing
- Getting help

Introduction



The literature review

The literature review

"The literature review is a written overview of major writings and other sources on a selected topic. Sources covered in the review may include scholarly journal articles, books, government reports, Web sites, etc. The literature review provides a description, summary and evaluation of each source. It is usually presented as a distinct section of a graduate thesis or dissertation."

https://library.concordia.ca/help/writing/literature-review.php

Why do a literature review?

- To become more knowledgeable
- Demonstrate your knowledge
- Identify key researchers, publications, and methodologies
- Identify holes in knowledge
- Identify keywords/subject vocabulary
- Helps to delimit the research problem
- Avoid areas already investigated

<u>Justus J. Randolph. "A Guide to Writing the Dissertation Literature Review"</u> <u>Practical Assessment, Research & Evaluation 14.13, 2009.</u>

TABLE OF CONTENTS

TABLE OF CONTENTS......vii

LIST OF TABLESxx
LIST OF ABBREVIATIONS AND SYMBOLSxxiii
1 INTRODUCTION AND SCOPE OF DISSERTATION
1.1 General
1.2 Human response to whole-body vibration
1.3 Review of published biodynamic data on whole body biodynamic
response
1.3.1 Influence of subject mass
1.3.2 Influence of excitation magnitude and frequency
1.3.3 Influence of sitting posture on the biodynamic response20
1.3.4 Influence of gender
1.3.5 Summary of reported biodynamic response characteristics26
1.4 Review of biodynamic models
1.5 Scope of the dissertation research
1.6 Objective of the dissertation research
1.7 Thesis organization

ed Body Under Vertical

Table 1.1: Summary of experimental conditions employed in different studies.

Authors	Subject			Excitation			Reported
	Number and gender	Body mass (kg)	Posture	Туре	Level	Frequency Range(Hz)	Functions
Coermann (1960)[22]	8 males	70-99	Standing, sitting with feet not supported, no backrest	Sine	0.1, 0.2 and 0.3g	1-20	DPMI and STHT
Vogt et al., (1969)[24]	10 males	79(mean)	Erect sitting, loosely restrained, feet supported, but not vibrated	Sine	0.5g with increased gravity of 1, 2 and 3g	2-15	DPMI, STHT
Suggs et al., (1970)[25]	11 males	58-90	Sitting upright with hands in lap, feet supported, no backrest	Sine	0.10g peak to peak	1.75-10	DPMI
Miwa (1974)[23]	5 males	50-76	Standing; kneeling; sitting erect and relaxed, feet not vibrated	Sine	0.1g r.m.s	3-200	DPMI
Griffin (1975)[26]	12 males	60-88	No backrest	Sine	0.2-0.4m s ⁻² r.m.s	7-75	STHT
Cohen et al., (1977)[27]	6 males	55-82	Comfortable neutral sitting posture; Tractor non-cushioned seat; no backrest	Sine	0.69 ms ⁻² r.m.s	2.5-5	STHT
Mertens (1978)[28]	6 males 3 females	57-90	Upright sitting with feet not supported	Sine	0.4g r.m.s with increased gravity of 1,2, 3 and 4g	2-20	DPMI STHT
Griffin et al., (1978)[29]	56 males 28 females 28 children	Not stated	Sitting, increasing height of footrest, no backrest	Sine	1 ms ⁻² r.m.s	4 and 16	STHT
Griffin et al., (1979)[30]	18 males 18 females	Not stated	Comfortable; upright; relaxed; stiff, Increasing height of footrest, no backrest	Sine	1 <i>ms</i> ⁻² r.m.s	1-100	STHT

Wang, Wenping. "A Study of Force-Motion and Vibration Transmission Properties of Seated Body Under Vertical Vibration and Effects of Sitting Posture." Concordia University (Canada), 2007.

REFERNCES

1. Griffin, M.J., 1990. Handbook of Human Vibration, Academic Press Limited,

2. Seidel, H., 2005. On the relationship between whole-body vibration exposure and

Environmental Health 59, 205-220.

London.

3. Seidel, H., Blüthner R., Hinz B., Schust, M., 1998. On the health risk of the lumbar spine due to whole-body vibration - theoretical approach, experimental data and evaluation of whole-body vibration, Journal of Sound and Vibration 215 (4), 723-741.

spinal health risk. Industrial Health, 43, 361-377.

Bovenzi, M., Hulshof, C. T. J., 1998. An updated review of epidemiologic studies on the relationship between exposure to whole-body vibration and low back pain. Journal of Sound and Vibration 215 (4), 595-612.

5. Hulshof, C., Van Zanten, B.V., 1987. Whole-body vibration and low back pain. A review of epidemiologic studies. International Archives of Occupational and

- 6. Magnusson, M. L., Pope, M. H., Hulshof, C., and Bovenzi, M., 1998. Development of a protocol for epidemiological studies of whole-body vibration and musculoskeletal disorders of the low back. Journal of Sound and Vibration 215 (4), 643-651.
- 7. Seidel, H., Heidel, R., 1986. Long term effects of whole-body vibration a critical survey of literature. International Archives of Occupational and Environmental Health 58, 1-26.
- 8. Boileau, P.-É., 1995. A study of secondary suspension and human driver response to whole-body vehicular vibration and shock. Ph.D., Thesis, Concordia University, Montreal, Canada.
- 9. Wu, X., 1998. Study of driver-seat interactions and enhancement of vehicular ride vibration environment. Ph.D. Thesis, Concordia University, Montreal, Canada.
- 10. Boileau, P.-É. Wu, X. and Rakheja, S., 1998. Definition of a range of idealized values to characterize seated body biodynamic response under vertical vibration. J.

Books

Literature reviews

Theses/dissertations

Sound and Vibration 215 (4) 841-862 Wang, Wenping. "A Study of Force-Motion and Vibration Transmission Properties of Seated Body Under Vertical Vibration and Effects of Sitting Posture." Concordia University (Canada), 2007.

19. Boileau, P.E. Rakheja, S. Yang, X. and Stiharu, I., 1997. Comparison of biodynamic response characteristics of various human body models as applied to seated vehicle drivers. Noise & Vibration Worldwide, October, 7-14. 20. Seidel, H., Griffin, M.J., 2001. Modeling the responses of the spinal system to whole-body vibration and repeated shock. Clinical Biomechanics 16 (Supplement 1), S3-S7. 21. Griffin, M.J., 2001. The validation of biodynamic models. Clinical Biomechanics 16 (Supplement 1), S81-S92. 22. Coermann, R.R., 1962. The Mechanical Impedance of the Human Body in Sitting and Standing Position at low frequencies, Human Factors, 227-253. 23. Miwa, T., 1975. Mechanical impedance of human body in various postures. Vibration and Effects of Sitting Posture." Concordia University (Canada), 2007.

Standards

Peer reviewed/ scholarly journal articles

Wang, Wenping. "A Study of Force-Motion and Vibration Transmission Properties of Seated Body Under Vertical

12. International Organization for Standardization, ISO-5982: 2001. Mechanical vibration and shock range of idealized values to characterize seated-body

13. Rakheja et al., 1997. Estimation of vibration transmission of the seat-human system though measurements of the seat-load system. Research Report, CONCAVE

14. Bendat, J.S., Piersol A.G., 1992. Random data-analysis and measurement

15. Lee, R.A., Pradko, F., 1968. Analytical analysis of human vibration, SAE paper

16. International Organization for Standardization ISO 2631-1, 1997. Mechanical vibration and shock - evaluation of human exposure to whole - body vibration. Part

17. Lewis, C.H., Griffin, M.J., 1998. A comparison of evaluations and assessments obtained using alternative standards for predicting the hazards of whole-body

vibration and repeated shock. Journal of Sound and Vibration, 215 (4), 915-926.

18. Mansfield, N.J., Holmlund, P., Lundström, R., 2000. Comparison of subjective responses to vibration and shock with standard analysis methods and absorbed

power. Journal of Sound and Vibration 230 (3), 477-491.

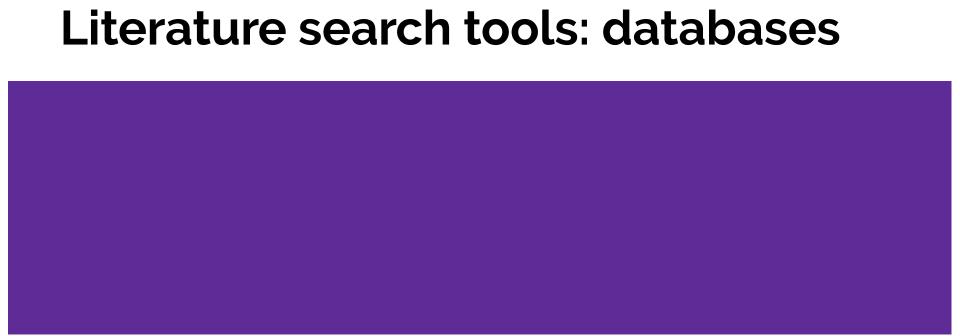
biodynamic response under vertical vibration.

Research Center, Concordia University.

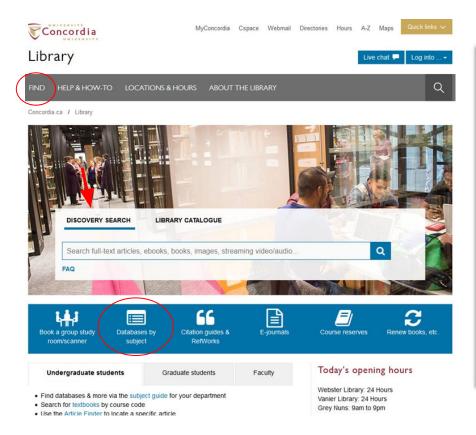
680091.

1, General Requirements.

procedures. New York, John Wiley & Sons.



How to find and access literature search tools





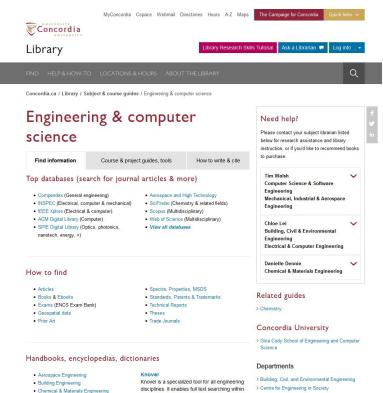
Engineering & Computer Science Subject Guide

- Links to databases, books, ebooks, data, standards, technical reports, etc.
- Handbooks, encyclopedias, and dictionaries
- Course and project guides
- Writing and citation guides (IEEE, Zotero)
- Librarian contact information

From library website:

Help & How-To -> Subject & course guides -> Engineering & Computer Science

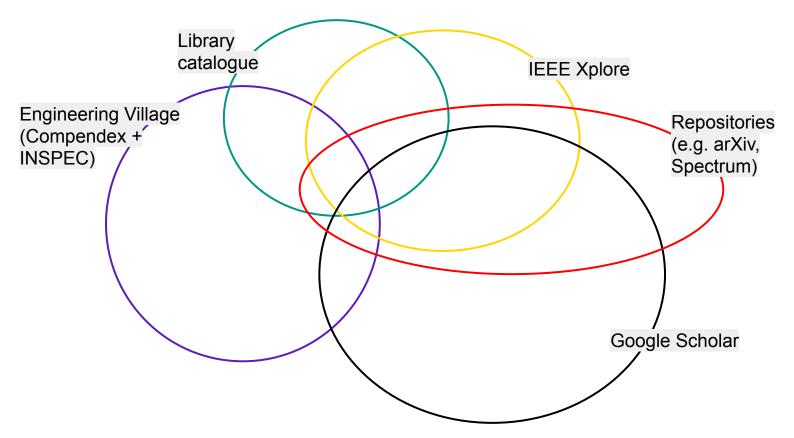
https://www.concordia.ca/library/guides/encs.html



Literature databases

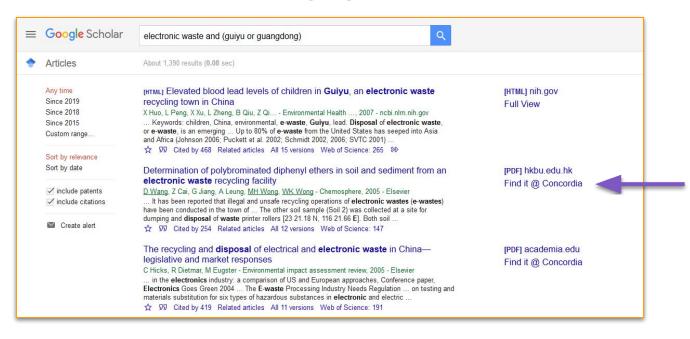
- Bibliographic databases (citations + abstracts)
 INSPEC & Compendex (Engineering Village)
- 2. **Full-text databases & publisher databases**IEEE Xplore, ACM Digital Library
- Citation databases
 Web of Science, Scopus
- Search engines
 Google Scholar, Semantic Scholar
- Format-specific databases
 Proquest Dissertation & Theses
- 6. **Open access repositories** *full contents, free to all, no paywall* Spectrum (Concordia), arXiv

How to find and access research?



Google Scholar

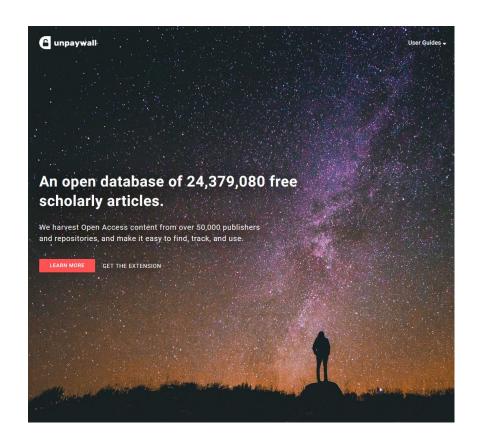
Set up "Library Links" to add Find it! @ Concordia button to Google Scholar results: https://library.concordia.ca/find/google-scholar.php



Unpaywall

- Chrome/Firefox extension that will check paywalled articles against database of 24 million+ open access articles in respositories like arXiv and Spectrum to see if there is a free, legal, non-paywalled version of the article
- Big timesaver!

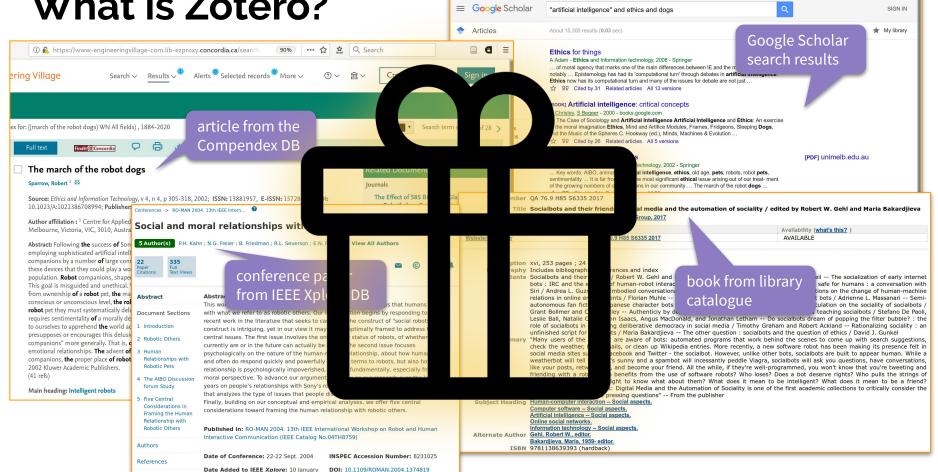
https://unpaywall.org/



Literature search tools: ZOtero

What is Zotero?

Citations



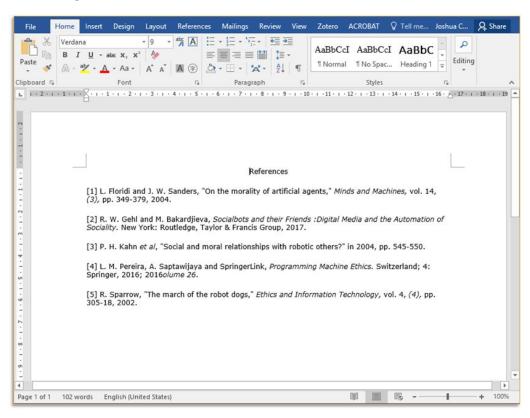
←) → C! ♠

https://scholar.google.ca/scholar?hl=en&as_sdt=0%2C5&g=

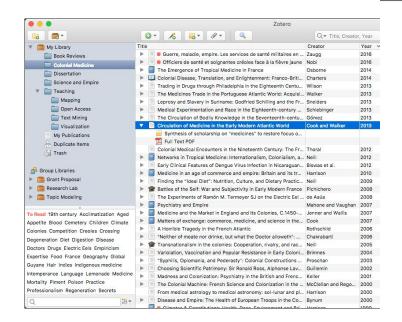
E ··· ☆ 호 Q Search

G

Zotero gives you this



Zotero setup





Concordia.ca / Library / Help & how-to / Citing / Zotero

Zotero



Transferring Citations from Refworks to

Word Processor Integration

Login to Zotero

New to Zotero? Click on "Register for a free account" from Zotero's main login page.

What is Zotero?

Zotero is a desktop application that allows you to:

- Manage and organize the bibliographic references you find in library catalogues, databases, and on the web
- · Prepare a bibliography or reference list automatically
- Insert and automatically format in-text citations and a bibliography into a paper using Microsoft Word, LibreOffice, Google Docs and other word processors and writing systems.

Zotero Help

- Zotero User Guide
- · Zotero How-to Videos
- Steps for importing RefWorks Citations into Zotero

Who should I contact if I need help or if I have guestions?

- Solutions for many problems can be found on the Zotero Support page: https://www.zotero.org/support/.
- You can also contact the Concordia Library's citation team at lib-citation@concordia.ca

Citing Engineering Village

The Zotero web browser plug-in is not currently working with the Engineering Village database (including Compendex, Inspec and GEOBASE). To cite articles from Engineering Village using Zotero please refer to the Engineering Village Zotero instructions

Word Processor Integration

After downloading and installing the Zotero desktop application, the related plugins should automatically be installed on whatever word processing software you have on your computer. More information about these plugins, including detailed explanations of their features, can be found through the following links:

https://library.concordia.ca/help/citing/zotero/index.php

9 E

Search strategies

Forming search strategies

Choose a topic to research.

Write a question, which is clear, does not have an obvious answer, and requires analysis and research.

Identify important terms, concepts, keywords for your search strategy. *For example:*

How does electronic waste recycling affect citizens living in Guiyu, China?

=	Google Scholar	how does electronic waste recycling affect students living in Guiyu China	
•	Articles	About 611 results (0.11 sec)	My profile
	Any time	Environmental, social, and economic implications of global reuse and	[PDF] academia.edu
	Since 2019	recycling of personal computers	
	Since 2018	E Williams, R Kahhat, B Allenby science & technology, 2008 - ACS Publications	
	Since 2015 Custom range	The significantly lower price of used goods can make the difference between access and Growth of informal recycling informal reuse/ recycling is economically driven because it runs a net profit Socially, computers are of particular importance vis a vis their enabling role in using	
	Sort by relevance	☆ ワワ Cited by 294 Related articles All 15 versions	
	Sort by date	Informal electronic waste recycling : a sector review with special focus on China	[PDF] psu.edu
	✓ include patents	X Chi, M Streicher-Porte, MYL Wang, MA Reuter - Waste Management, 2011 - Elsevier	
	✓ include citations	While literature sources do not provide much information about how informal recyclers are interacting or What can no longer be reused is dismantled manually, and then treated in unqualified	
	Create alert	Consequently, qualified recyclers are in danger of making losses, as the total burden ☆ 꾀 Cited by 386 Related articles All 12 versions	
		Heavy metals concentrations of surface dust from e-waste recycling and its	[HTML] acs.org
		human health implications in southeast China	
		AOW Leung, NS <u>Duzgoren-Aydin</u> science & technology, 2008 - ACS Publications As the composition of settled dust is similar to atmospheric suspended particulates, it can be	
		an Children are usually exposed to greater amounts of dust than adults as a result of pica and	
		Exposure to high levels of heavy metals can result in acute and chronic toxicity, such as	
		☆ ワワ Cited by 433 Related articles All 9 versions	
		The electronics revolution: from e-wonderland to e-wasteland	[PDF] usp.br
		OA Ogunseitan, JM Schoenung, <u>JDM Saphores</u> , 2009 - science.sciencemag.org	
		The Electronics Revolution: From E-Wonderland to E-Wasteland 3 Department of Civil and Environmental Engineering and Department of Economics, University of California 4 Department of Electrical Engineering and Computer Science, University of California, Irvine, CA	
		☆ 匆 Cited by 160 Related articles All 13 versions	
		IPDELKey social impacts of electronics production and WEEE-recycling in	rpnej oeko de



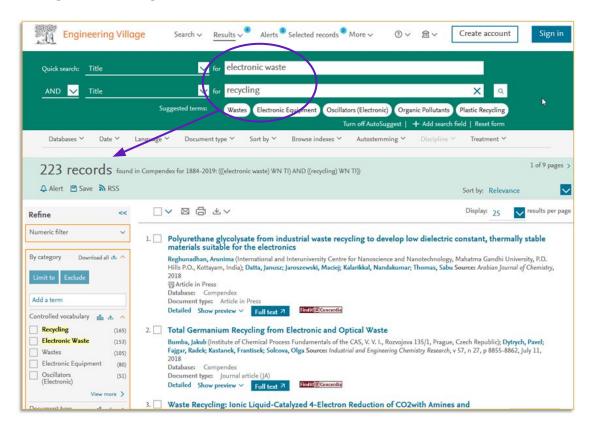
No results from over 22 million records?!?

Identify key concepts

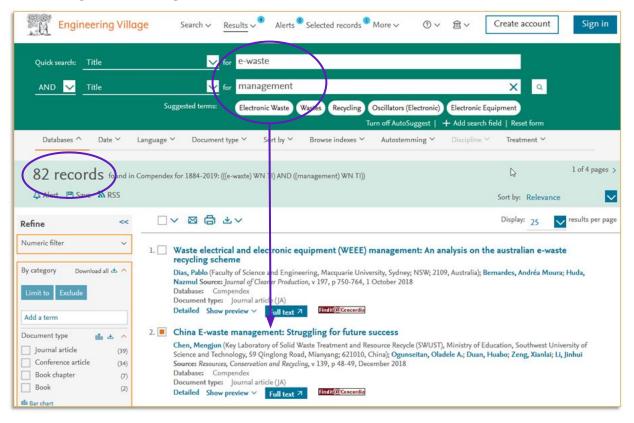
How does electronic waste recycling

affect citizens living in Guiyu, China?

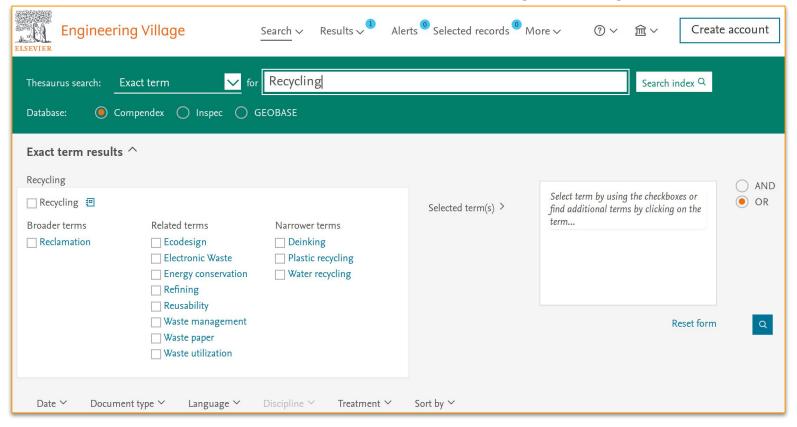
Need for synonyms and related terms



Need for synonyms and related terms



Using the Thesaurus to find synonyms

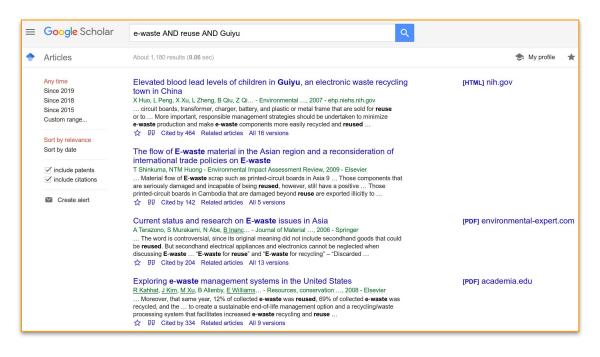


How does electronic waste recycling affect citizens living in Guiyu, China?

Simple

Concept 1 AND Concept 2

Concept 1 AND Synonym 2



How does electronic waste recycling affect citizens living in Guiyu, China?

Advanced



Search tip: truncations!

recycling = recycling

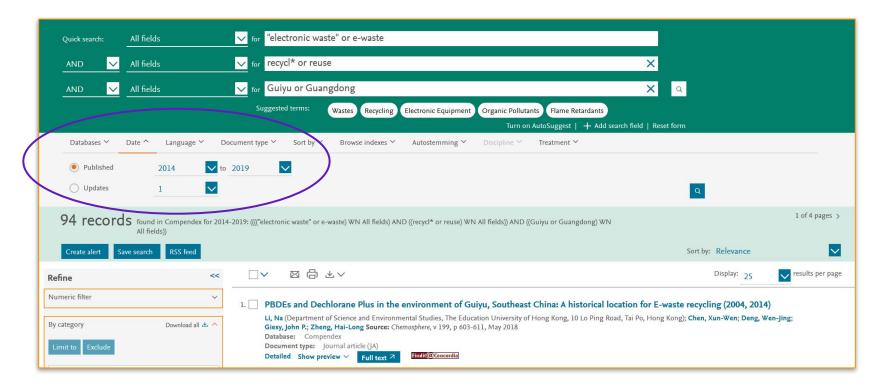
recycl* = recycle OR recycled OR recycling

Search tip: quotation marks!

electronic waste = electronic AND waste

"electronic waste" = phrase search

How does electronic waste recycling affect citizens living in Guiyu, China?



RECAP: Finding what you want in a database

(recall)



RECAP: Finding what you want in a database

(precision)



RECAP: Finding what you want in a database

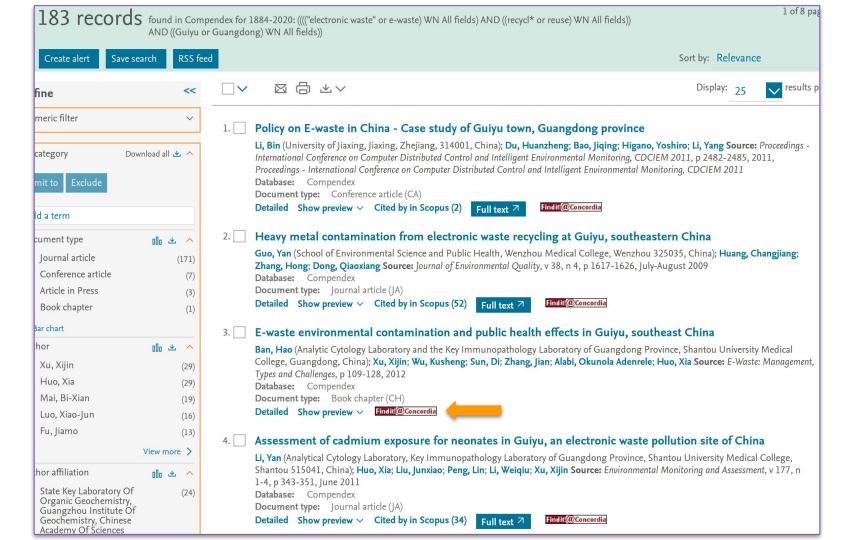
(staying on target while broadening the search)



Accessing articles, books, and other resources

I found an article I want in (e.g.) Compendex. How do I get access to the full text?

- 1. Look for **Full text** or **PDF** button, if one exists.
- 2. Look for **Find it @ Concordia** button
- 3. Request a copy through Interlibrary Loan (COLOMBO)
- 4. **Ask a Librarian** if you need help!





You are looking for:

Heavy metal contamination from electronic waste recycling at Guiyu, southeastern China Guo, Yan. Journal of Environmental Quality v. 38 no. 4 p. 1617 Year: 2009

Click on the link(s) below to get the article:

ProQuest Central

Scheck the library catalogue:

Search for the Journal in the library catalogue (by ISSN 00472425)

More options:

Get the publication from Concordia's collection through Inter-Campus & Article Delivery

Get the publication through another library using Interlibrary Loan

Ask a Librarian

Search the library catalogue

What is "Find it! @ Concordia"?



You are looking for:

E-waste environmental contamination and public health effects in Guiyu, southeast China

Ban, Hao. E-Waste: Management, Types and Challenges v. no. p. 109 Year: 2012



Check the library catalogue:

<u>Search for the item in the library catalogue</u> (by title *E-Waste: Management, Types and Challenges*)

Interlibrary Loan:

Get the publication through another library using Interlibrary Loan (COLOMBO)

COLOMBO login help

More options:

Get the publication from Concordia's collection through Inter-Campus & Article Delivery

Get the publication through another library using Interlibrary Loan

Ask a Librarian

Search the library catalogue

What is "Find it! @ Concordia"?

Accessing resources outside Concordia

What if Concordia doesn't have what you want and you can't find it on the Web?

- BCI card
 https://library.concordia.ca/find/bci-card.php
- Interlibrary loan (COLOMBO)
 https://library.concordia.ca/find/interlibrary-loans/
- Suggest a purchase
 https://library.concordia.ca/find/suggest-a-purchase.php

Citing sources

Citing: General information

See **ENCS Subject Guide** for information on citing and **IEEE citation style**

What do you need to cite?

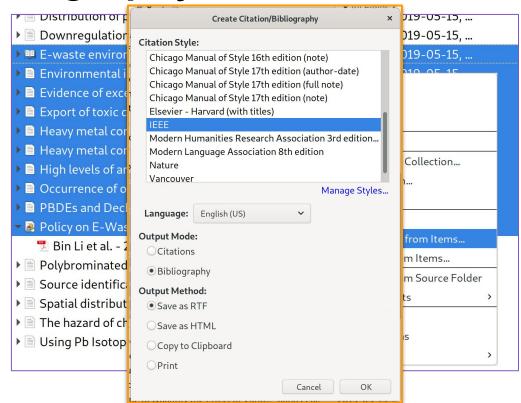
- Any text you quote from another document, website, book, etc.
- Paraphrasing someone's words or ideas
- Images, graphs, etc.

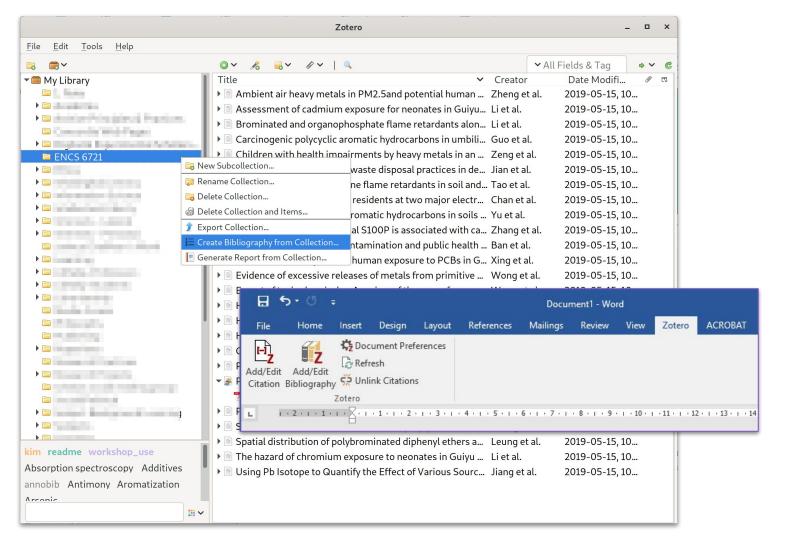
It is always better to err on the side of caution and to **cite the source of any information** you use in your writing.

Citing: Creating a bibliography

zotero

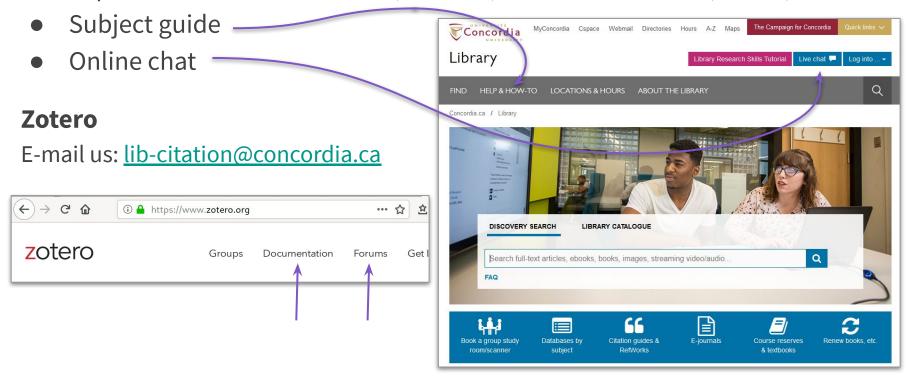
- Keeps track of your sources
- Creates your bibliographies for you in IEEE (or Chicago, etc.) style
- Easily insert citations while you're writing





Getting help

In person at the Ask Us! desk (Webster) or Reference desk (Vanier)



Questions?



Created by Takao Umehara from Noun Project