

**scite\_**

 **CONNECTED PAPERS**

 **Inciteful**

 **OPEN KNOWLEDGE MAPS**  
A visual interface to the world's scientific knowledge

  
**ResearchRabbit**

# Analyzing the Scholarly Conversation: New Tools for Efficiently Finding, Evaluating, and Visualizing Research

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J. Denice Lewis

Friday, June 3, 2022



# Agenda



What is Denice's why?

How we search now

Adding qualitative to the quantitative

Assessing your resources: Identifying retractions, withdrawals, etc.

Visualizing your search results

Integrating artificial intelligence and information literacy

Connecting with Denice on social media

Contacting Denice via email or phone



# Meet the presenter

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3<sup>rd</sup> career librarian

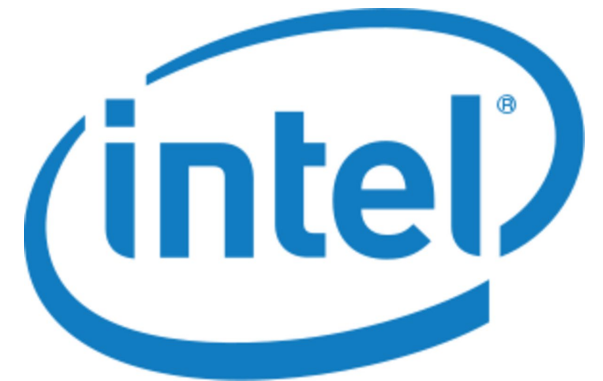
- Electrical Engineering, BS & MS
- Culinary arts, AA
- Library and Information Science, MS

Friday, June 3, 2022



# A little bit about me . . .

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# Personal Research Session

A graduate Physics student couldn't find an article on Web of Science

What topic are you resear...

What I am trying to do is find all the scientific papers which reference a particular article titled "On Continued Gravitational Collapse" that was published in 1939 and attached below. The issue is that the database I am using called Web of Science doesn't seem to have this specific article.

Resource	Citation Count	Create an Alert	Extracting the Data and Additional Information
<a href="#">Google Scholar</a>	2038	Yes	<p>I would recommend using the software Publish or Perish to extract the information from Google Scholar. Information on using Harzing's Publish or Perish is available at <a href="https://libguides.libraries.wsu.edu/c.php?g=294448&amp;p=1960387">https://libguides.libraries.wsu.edu/c.php?g=294448&amp;p=1960387</a>.</p> <p><b>NOTE:</b> <a href="https://scholar.google.com/intl/en/scholar/inclusion.html#craw">https://scholar.google.com/intl/en/scholar/inclusion.html#craw</a> details on how Google Scholar's web crawlers operate.</p>
<a href="#">Semantic Scholar</a>	1,180	Yes	Semantic Scholar contains different filters that you can use to limit/target the results. However, you cannot export the results.
<a href="#">LENS.ORG</a>	1,349	Yes  Details provided at <a href="https://support.lens.org/help-resources/workspaces/dynamic-collections/">https://support.lens.org/help-resources/workspaces/dynamic-collections/</a>	<p>LENS.ORG provides a variety of ways to analyze the citation results. The video <a href="https://www.screencast.com/t/Bt5y9mOhP1F">https://www.screencast.com/t/Bt5y9mOhP1F</a> provides a way to filter the results by journal article and view different visualizations analyzing the citations.</p> <p>Create an account to create a dynamic collection. You can export the results. To circumvent the <u>1,000 record</u> limitation, batch the export by filtering by the year of the publication.</p>
<a href="#">Dimensions.ai</a>	1,061	Yes	Create an account to set an alert as well as to export the citations. To export the citations, click on the "View in Dimensions" button, click the link "Show all" to the left of Publication Citations, and after logging in, Save/Export will appear in the bar at the top of the page.
<a href="#">Scite.ai</a>	1,209	Yes	<p>Scite.ai is a new tool <del>and is free</del>. It provides contextual analysis of the citations. You can see where the citation appears with the text of the citing document as well as if the citation is supporting, mentioning, contrasting, or unclassified.</p> <p>You will need to create an account to set-up an alert as well as to download the report citations.</p>



# LIB290: Information Literacy for Engineering (Spring 2022)



**9 out of the 11 students were seniors (82%)**

# How do we search now?

Truncation ( \* )

Keywords

Controlled vocabulary

Boolean logic

Phrase searching “ ”

Databases

Grouping

Google or another metasearch engine



# How do we search now?

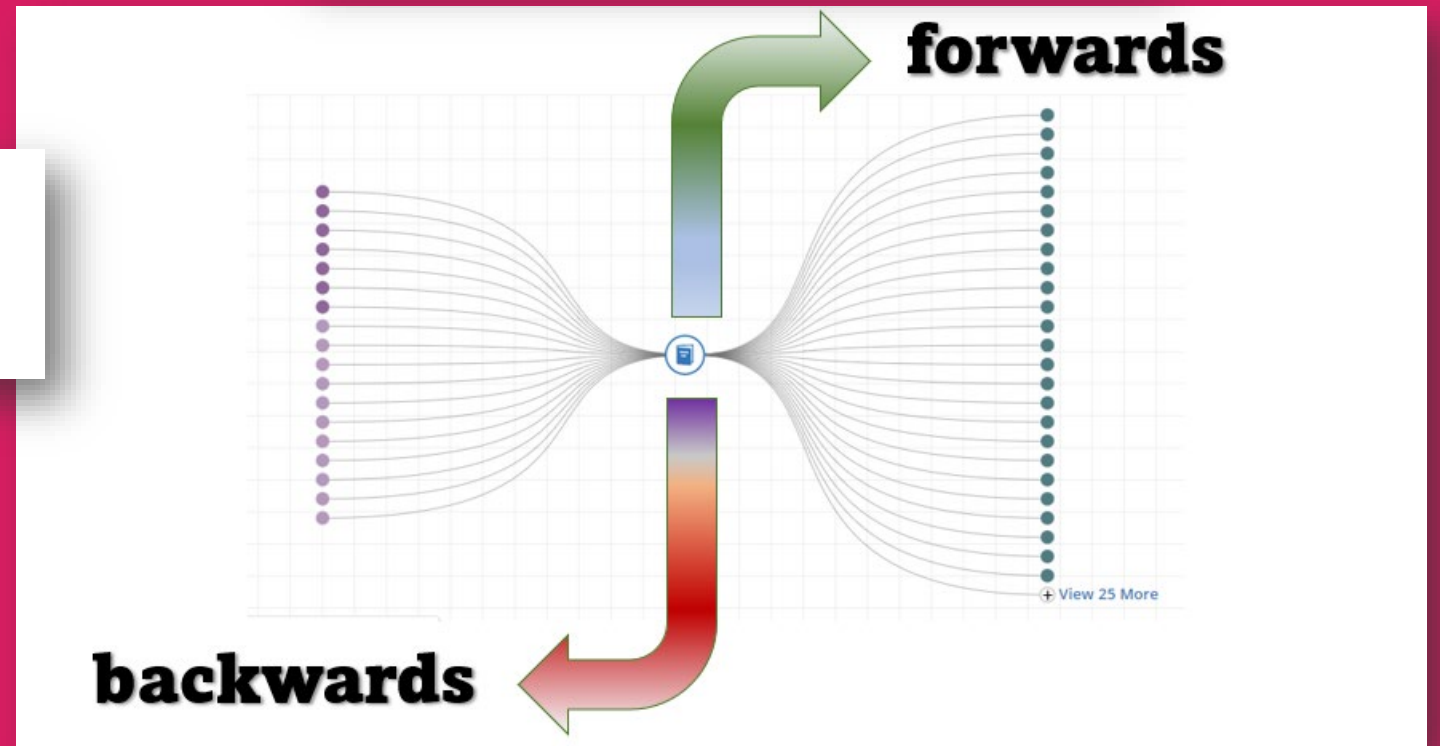
## Citation Research

A.K.A.

- citation searching
- citation chaining
- citation mining
- reference mining

Influence of mesopore volume and adsorbate size on adsorption capacities of activated carbons in aqueous solutions

By: Hsieh, Chien-To; Teng, Hsisheng  
Carbon (2000), 38(6), 863-869 | Language: English, Database: C.Aplus





# Adding the qualitative to the quantitative

Let's talk about scite.ai

- Smart citation statements
- See citation in context
- Citations tagged as supporting, contrasting, or mentioning
- Additional features . . .
- Fee-based, however the browser extension is free!

The screenshot shows the scite.ai website interface. At the top, there's a search bar with the query "dielectrophoresis AND 'cell separation'". Below the search bar, there are tabs for "Papers" and "Citation Statements", with "Citation Statements" selected. The main heading is "Citation Statement Search", with a link "How does Citation Statement Search work?". Below this, there's another search bar with the same query, a "Relevance" dropdown, a "Set Alert" button, and a "Get Executive Summary" button. A row of filters includes "Filters", "Authors", "Year", "Sections", "Types", "Citations", "Journal", "Affiliation", "Publication", and "Editorial Notice". Below the filters, it says "616 results". The main content area shows a "Paper Section: Introduction" on the left and a citation statement on the right. The citation statement is: "...Various methods have been used for cell separation. 16 – 18 Dielectrophoresis has emerged as a powerful tool for bioparticle separations. It is important to note that separations using these forces grow from early (and recent) cell characterizations using dielectrophoresis and impedance....". Below the statement, there's a "mentioning" tag with a confidence of 99% and a link to "flag classification". The paper title is "Biophysical Separation of Staphylococcus Epidermidis Strains Based on Antibiotic Resistance" by Jones<sup>1</sup>, Huey<sup>2</sup>, Davis<sup>3</sup> et al., 2015. There are tags for "Analyst", "Has correction 2015-12-2", and "Has erratum 2016". At the bottom, there's a row of icons: a document icon with "31", a checkmark icon with "3", a magnifying glass icon with "48", a question mark icon with "0", and a pencil icon with "2". There are also links for "View full text" and "Add to dashboard".

# Assessing your resources: Identifying retractions, withdrawals, etc.



Let's talk about scite.ai





## Reference Check

Upload a document (manuscript, grant, preprint, or published paper) to check the reliability of its references.

[Check out an example](#) or see [how it works](#).

Upload a PDF or docx document from your computer:

Choose File

or drag it here

No file chosen

Or paste a valid document (PDF or docx) URL

Generate Report

Cancel

scite.ai

Use Reference Check to verify  
the references in a document

Example

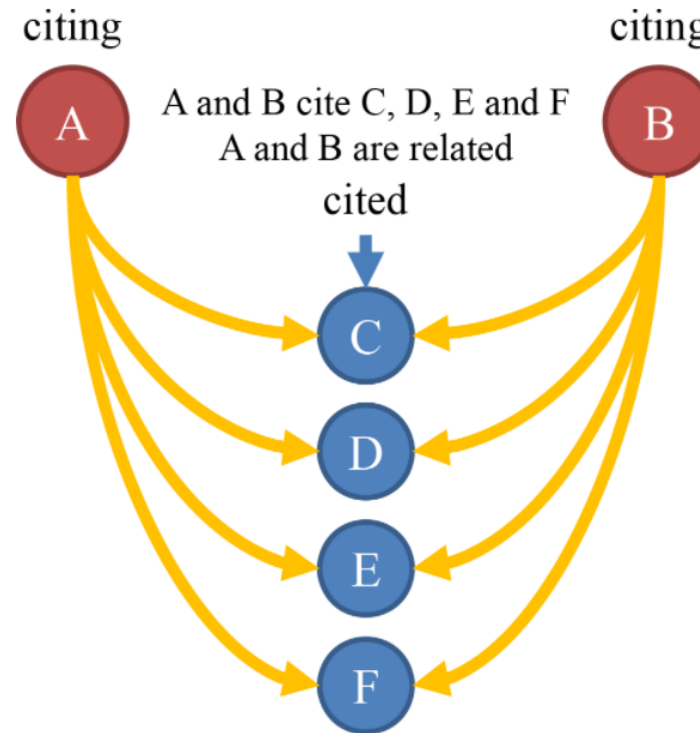


# What are ways that we can visualize resources?

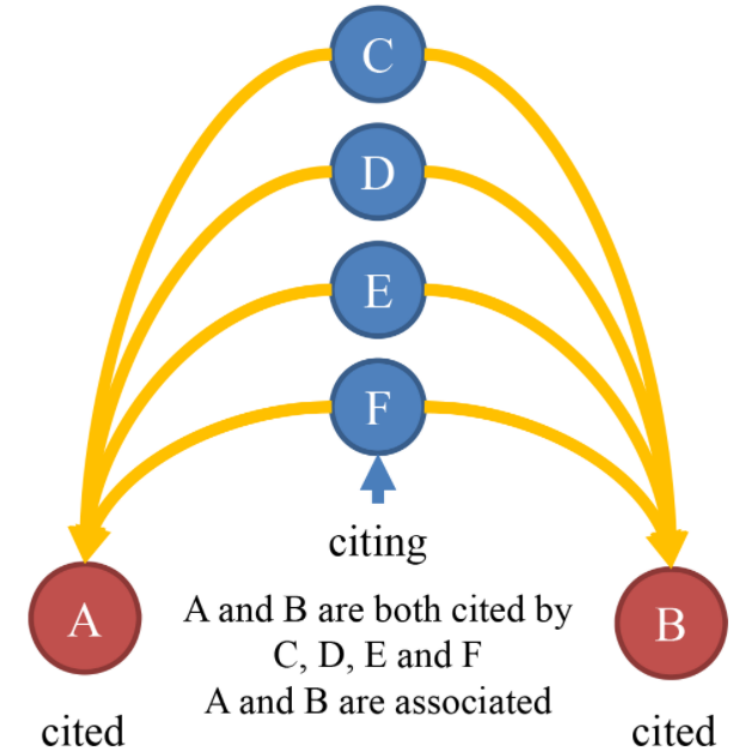
Let's talk about Connected Papers and Inciteful.xyz

# Semantic Similarity measures for citations

- **Bibliographic coupling:** Two resources are connected if their references list one or more documents in common
- **Co-citation:** Two resources are cited frequently within the same document

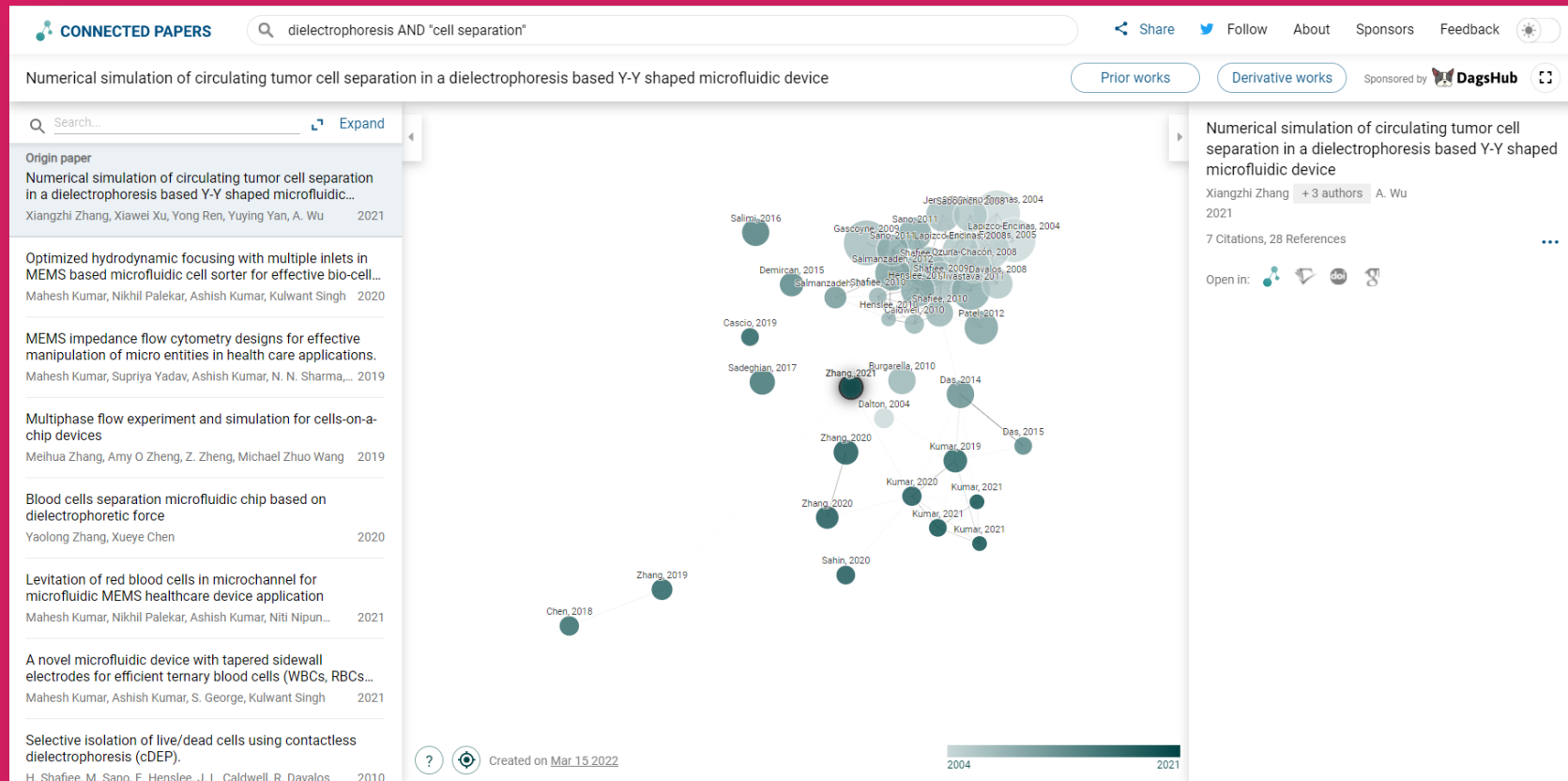


(a) Bibliographic Coupling



(b) Co-Citation

# Connected Papers



- Visual representation of similarity between papers
- Utilizes co-citation and bibliographic coupling
- How it works . . .
- Free!





## Cellular dielectrophoresis: Applications to the characterization, manipulation, separation and patterning of cells

Zachary R. Gagnon

ELECTROPHORESIS, vol 32 | DOI: 10.1002/elps.201100060

Over the past decade, dielectrophoresis (DEP) has evolved into a powerful, robust and flexible method for cellular characterization, manipulation, separation and cell patterning. It is a field with widely varying disciplines, as it is quite common to see DEP integrated with a host of applications including microfluidics, impedance spectroscopy, tissue engineering, real-time PCR, immunoassays, stem-cell characterization, gene transfection and electroporation, just to name a few. The field is finally at the point where analytical and numerical polarization... [view more](#)

**264**

Cited By

**96**

Citing

**2011**

Published

**No**

Open Access

**20,176**

Papers in Graph

**243,640**

Citations in Graph

**2**

Graph Depth

Links: [Semantic ScholarPub Med](#) | [Publisher](#) | [Full Text from LibKey](#) |

### Paper Filters ⓘ

Keywords

(hello AND world) NOT cruel

Min Distance



Max Distance



Min Year

2015

Max Year

2015

Filter

### Add Papers to the Graph

Paper Title or DOI

Paper title, DOI, PubMed URL, or arXiv URL

or [Import BibTeX file](#)

Click on the purple plus signs (+) to add the most interesting papers to the graph. We recommend that you **add at least five papers to the graph** in order to find the most relevant results. If the papers below don't seem relevant, **use the keyword filter** to find the ones which are.

[Learn More →](#)

Hanson, 2016



# Inciteful.xyz

- A powerhouse!
- How to use it . . .
- Free!

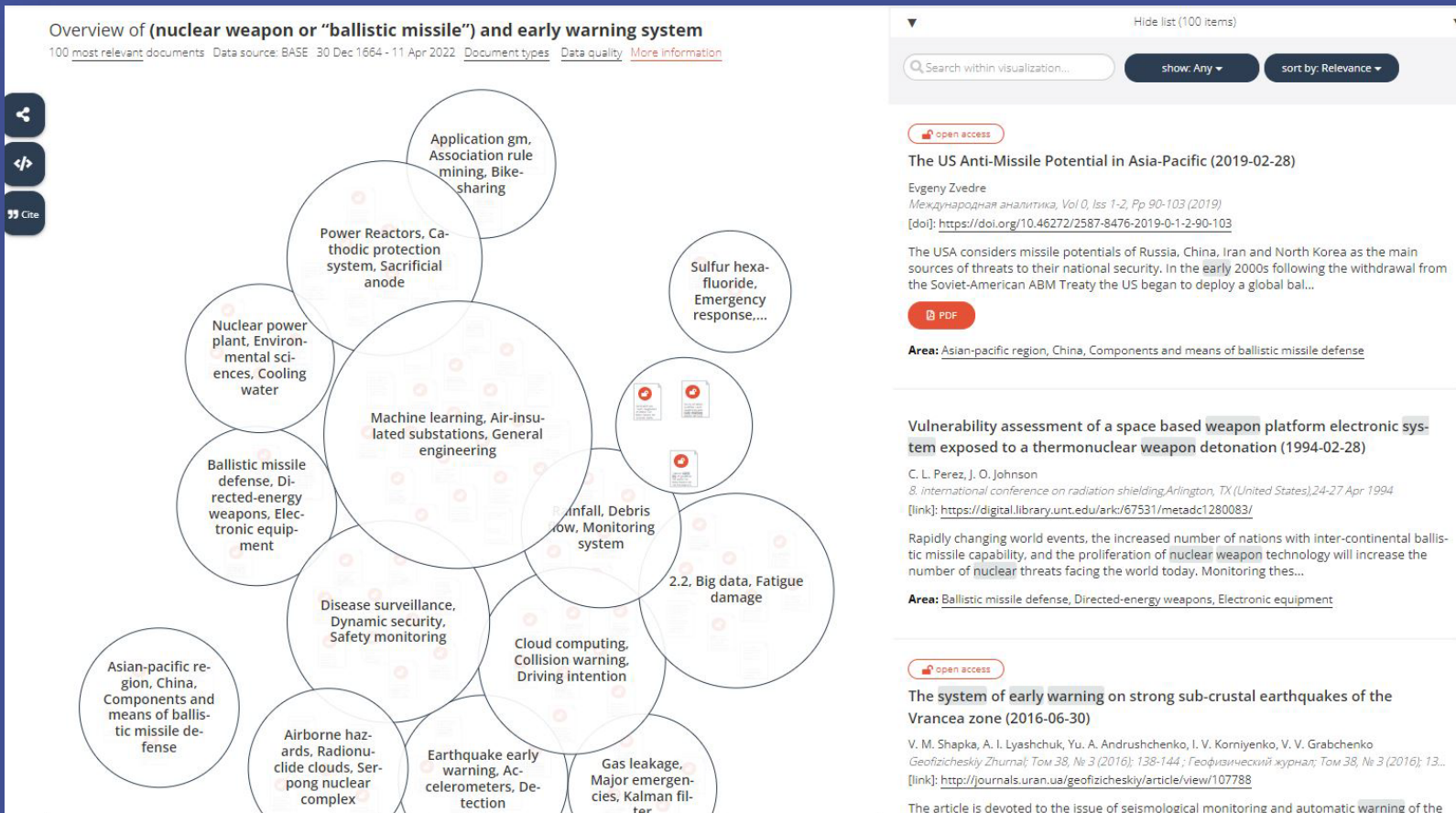


# Integrating artificial intelligence and information literacy

Let's talk about Open Knowledge Maps and Research Rabbit

# Open Knowledge Maps

- Get an overview of a research topic
- Clusters similar articles together
- Separates open access content from paywall content
- Uses text similarity and algorithms



# Research Rabbit

The screenshot displays the Research Rabbit web application interface. On the left, a sidebar contains navigation options: 'New Collection', 'New Category', 'Import Zotero Collection', and a list of collections including 'Uncategorized', 'Testing 1, 2, 3', 'LGBTQ in STEM', 'Copyright, Fair Use, and Open Access', 'Water filtration' (selected), 'Colorectal Cancer preoperative nutrition', 'Accelerometers and personal protective equipment', 'Dielectrophoresis AND "cell separation"', 'Nuclear rocket engine', 'Cast iron skillet', and 'Untitled Collection'. The main content area shows a filter set to 'Custom' with 'Abstracts' unchecked and 'Comments' checked. It displays a list of papers under the 'Water filtration' collection. The first paper is 'A critical review of point-of-use drinking water treatment in the United States' by Wu and Hoek (2021). The second is 'Slow sand filtration for water and wastewater treatment – a review' by Verma and Sharma (2017). The third is 'Gravity-driven membrane filtration for water and wastewater treatment: A review' by Pronk and Fane (2019). The fourth is 'Assessing Escherichia coli removal in the schmutzdecke of slow-rate biofilters' by Unger and Collins (2008). A green 'Add Papers' button is at the bottom of the list. On the right, a sidebar offers 'EXPLORE PAPERS' (Similar Work: 1032, Earlier Work: 3, Later Work: 2), 'EXPLORE PEOPLE' (These Authors: 18, Suggested Authors: 43), 'EXPORT PAPERS' (BibTeX, RIS, CSV), 'PUBLIC COLLECTION' (toggle), 'SHAREABLE LINK' (Copy), and 'COLLABORATORS' (Edit). A 'We're here to help!' chat bubble is at the bottom right. The bottom of the interface includes a 'Sync to Zotero' button.

- Get an overview of a research topic
- Clusters similar articles together
- Separates open access content from paywall content
- Uses text similarity and algorithms





Instagram



@jdenicelewis  
Public profile for vegan eats



**LinkedIn**

[www.linkedin.com/in/jdenicelewis](https://www.linkedin.com/in/jdenicelewis)  
Public way to post professional  
accomplishments and musings of  
an STEM academic librarian

# Thank you!

J. Denice Lewis

336) 758 – 1927

[lewisjd@wfu.edu](mailto:lewisjd@wfu.edu)

<https://zsr.wfu.edu/directory/denice-lewis/>

