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

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

New Tools for Efficiently Finding, Evaluating, and Visualizing Research
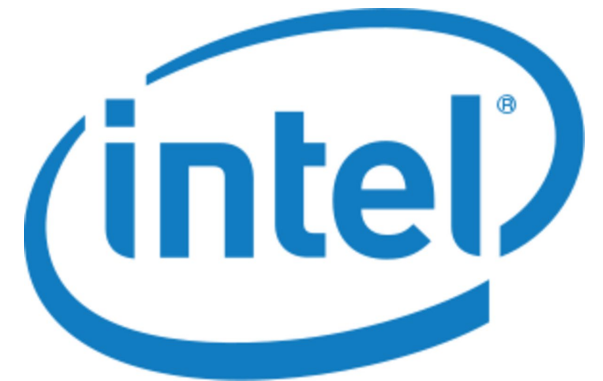
Meet the presenter

3rd career librarian

- Electrical Engineering, BS & MS

- Culinary arts, AA

- Library and Information Science, MS

A little bit about me . . .

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.

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

New Tools for Efficiently Finding, Evaluating, and Visualizing Research

Resource	Citation Count	Create an Alert	Extracting the Data and Additional Information
Google Scholar	2038	Yes	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 https://libguides.libraries.wsu.edu/c.php?g=294448&p=1960387 . **NOTE:** https://scholar.google.com/intl/en/scholar/inclusion.html#crawl details on how Google Scholar's web crawlers operate.
Semantic Scholar	1,180	Yes	Semantic Scholar contains different filters that you can use to limit/target the results. However, you cannot export the results.
LENS.ORG	1,349	Yes Details provided at https://support.lens.org/help-resources/workspaces/dynamic-collections/	LENS.ORG provides a variety of ways to analyze the citation results. The video https://www.screencast.com/t/Bt5y9mOhP1F provides a way to filter the results by journal article and view different visualizations analyzing the citations. Create an account to create a dynamic collection. You can export the results. To circumvent the 1,000 record limitation, batch the export by filtering by the year of the publication.
Dimensions.ai	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.
Scite.ai	1,209	Yes	Scite.ai is a new tool ~~and is free.~~ 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. You will need to create an account to set-up an alert as well as to download the report citations.

New Tools for Efficiently Finding, Evaluating, and Visualizing Research

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

New Tools for Efficiently Finding, Evaluating, and Visualizing Research

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?

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: CAplus

Citation Research

A.K.A.
- citation searching
- citation chaining
- citation mining
- reference mining

forwards

backwards

+ View 25 More
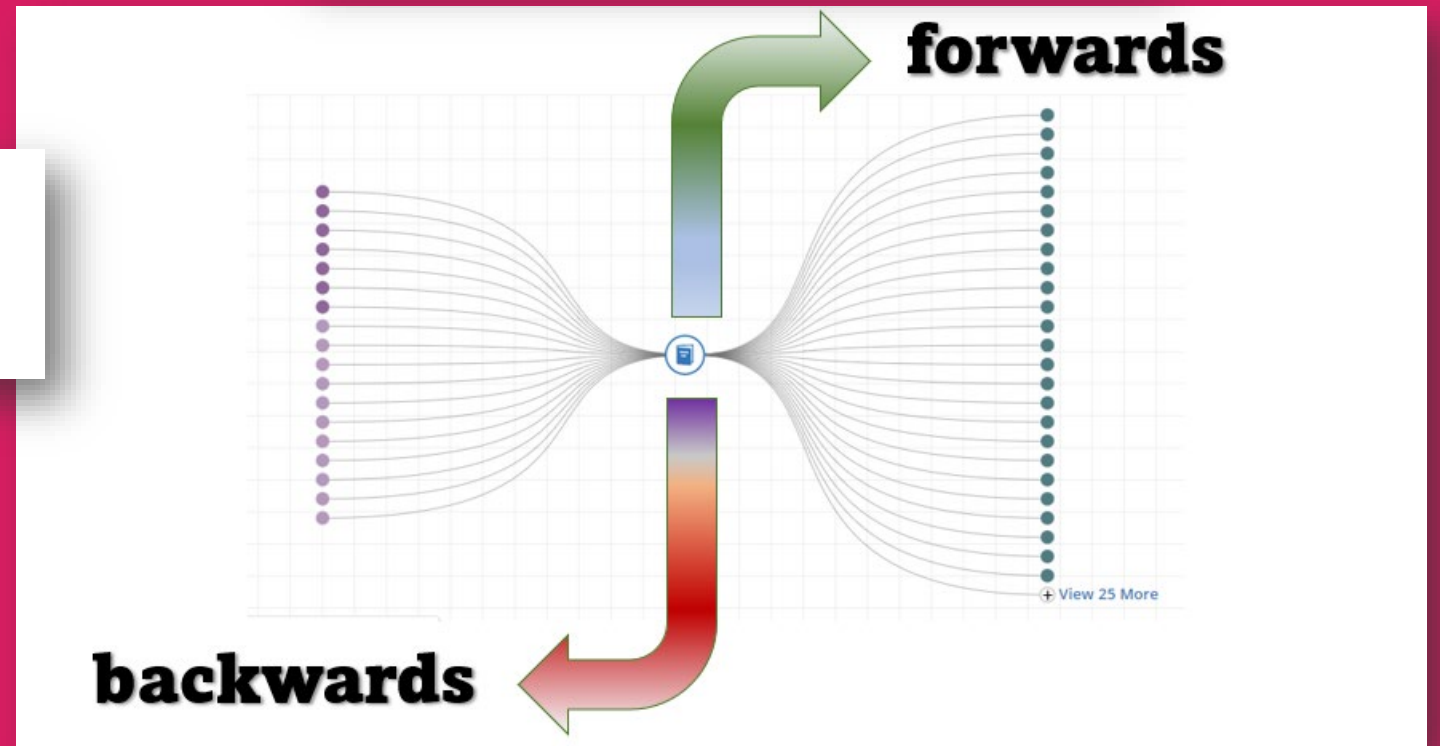
Adding the qualitative to the quantitative

Let's talk about scite.ai

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!

Assessing your resources: Identifying retractions, withdrawals, etc.

Let's talk about scite.ai

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

citing   citing

A and B cite C, D, E and F
A and B are related
cited

(a) Bibliographic Coupling

citing

A and B are both cited by
C, D, E and F
A and B are associated

cited   cited
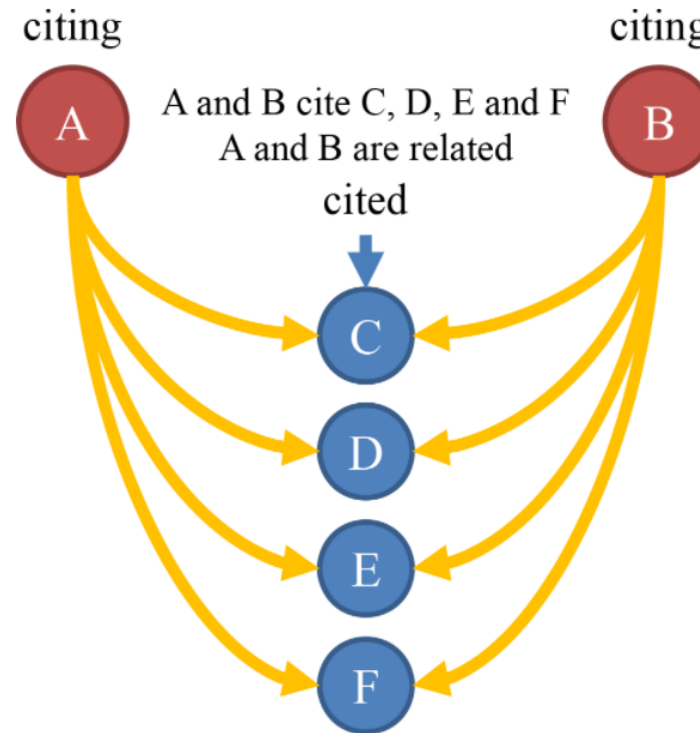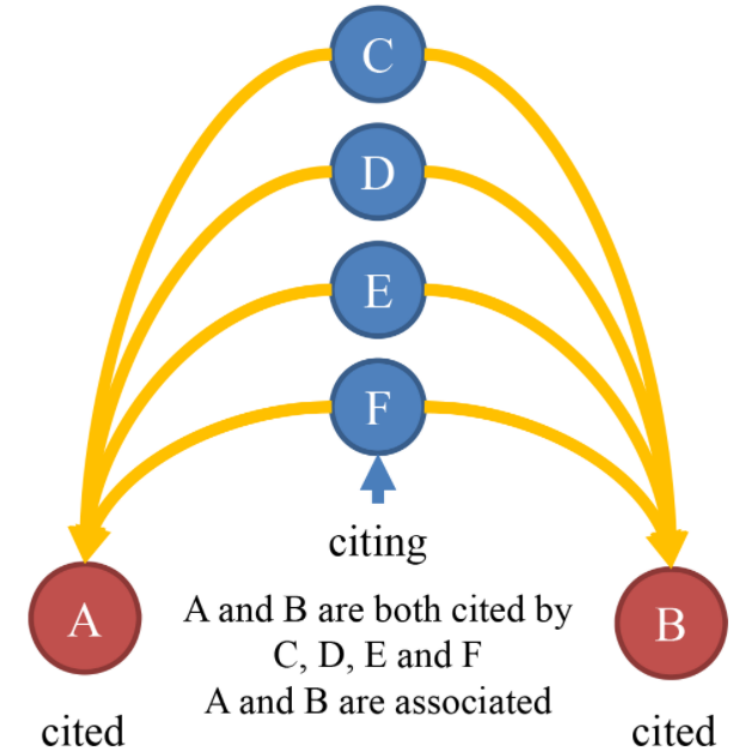
(b) Co-Citation

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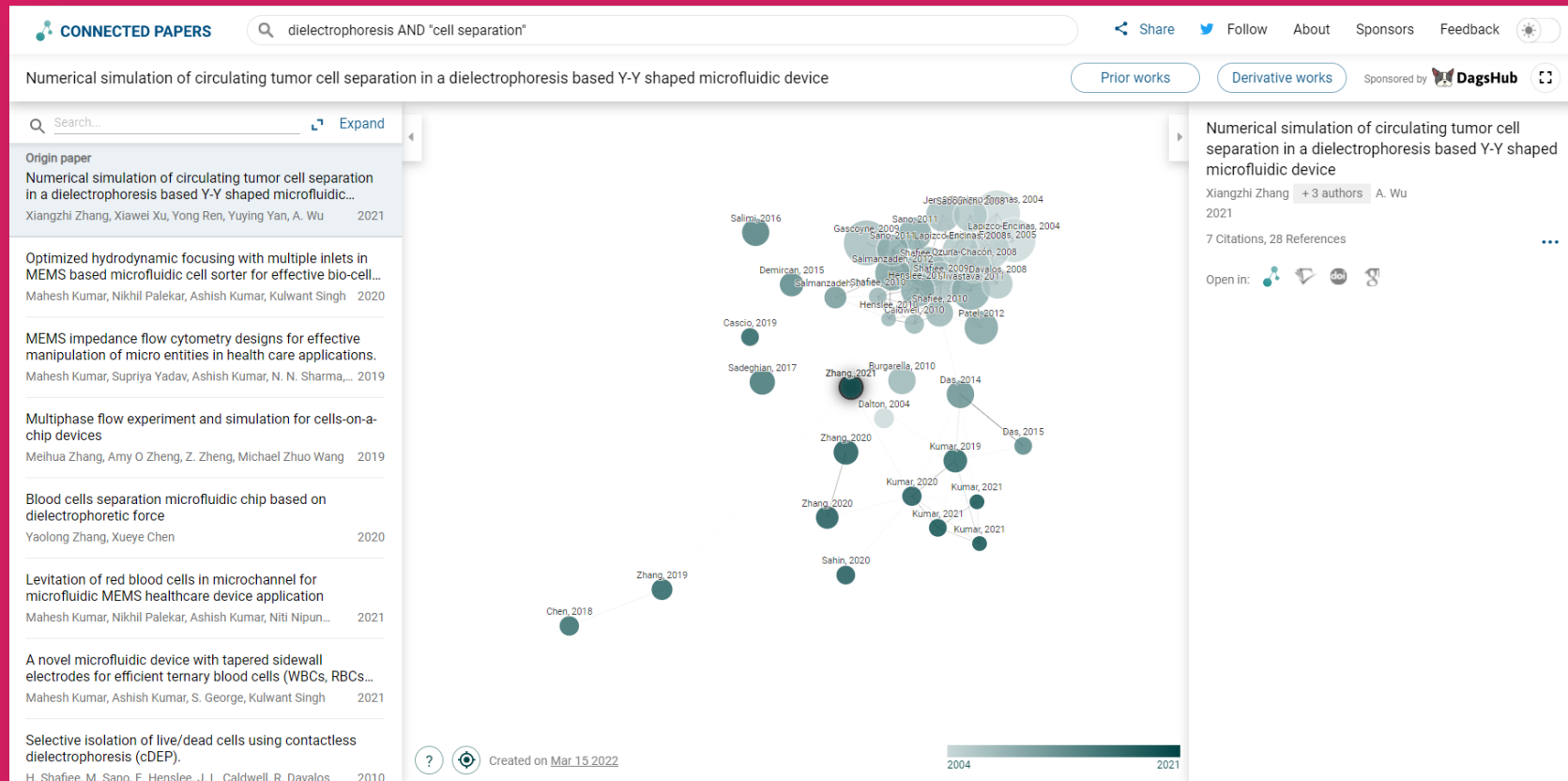
- Visual representation of similarity between papers
- Utilizes co-citation and bibliographic coupling
- How it works . . .
- Free!

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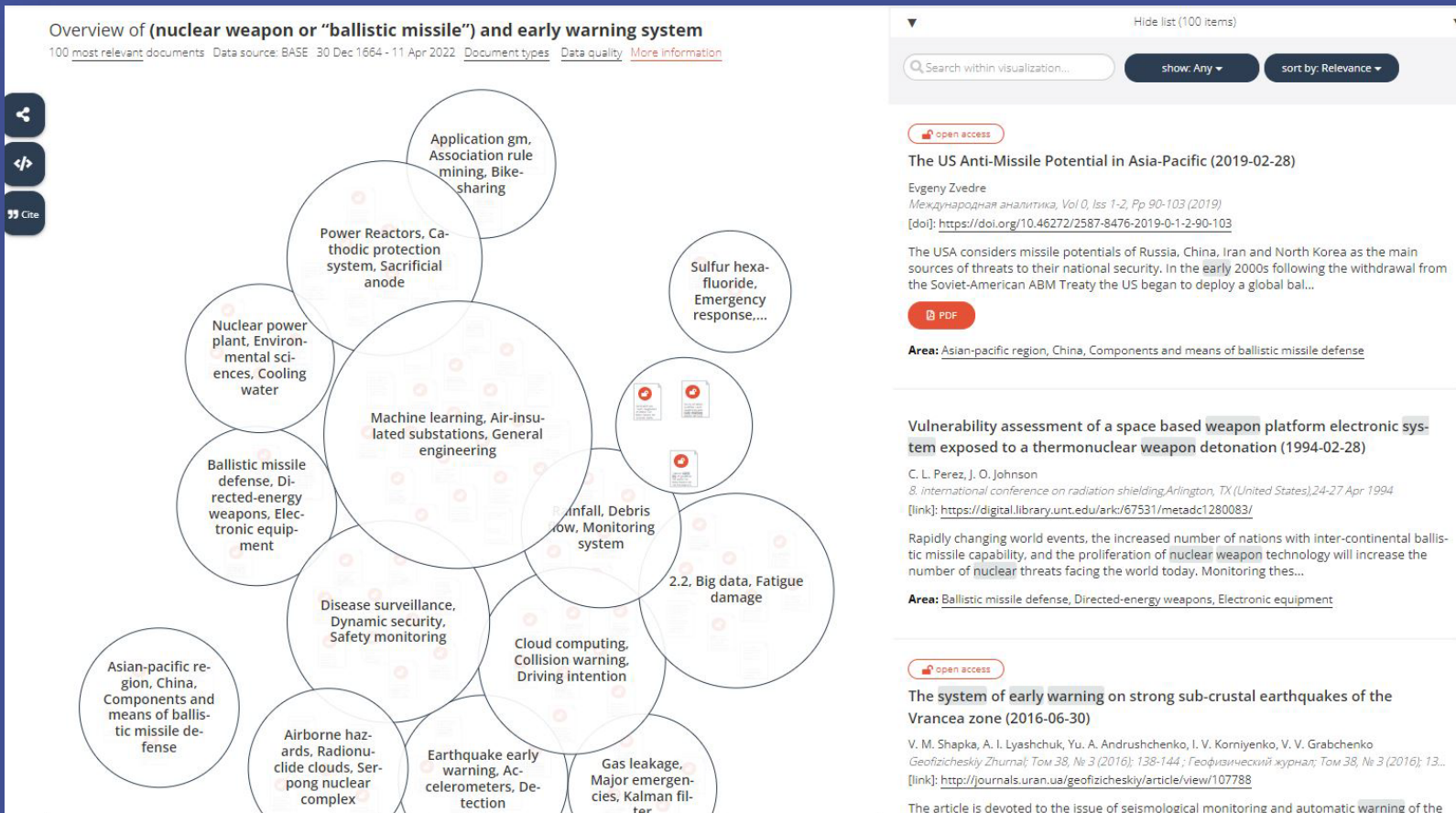
- A powerhouse!
- How to use it . . .
- Free!

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

- 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

New Tools for Efficiently Finding,
Evaluating, and Visualizing Research

LinkedIn

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

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