



March
2022

Conducting STEM Research Utilizing Open Access Tools

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Wake Forest University

Agenda

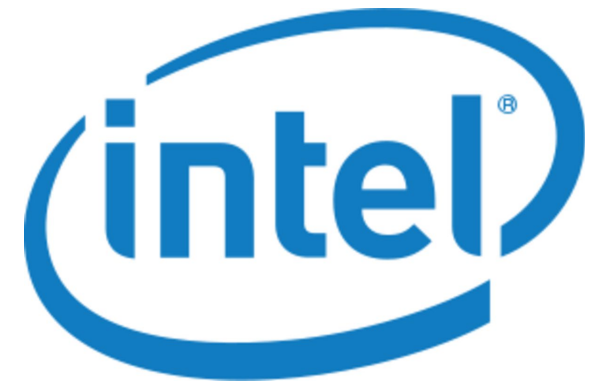
- What is my why?
- Alternatives to Web of Science
- Alternatives to SciFinder-n
- Other cool tools
- Demo
- Q & A



The Why

Opportunity Meets Happenstance

A little bit about me ...



Personal Research Session (PRS)

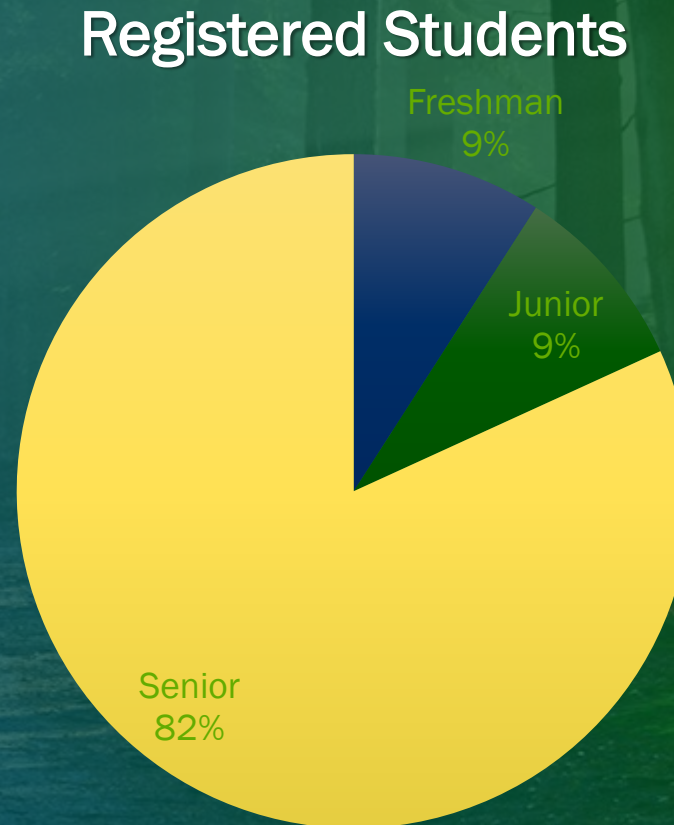
What topic are you research...

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
Google Scholar	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 https://libguides.libraries.wsu.edu/c.php?g=294448&p=1960387.</p> <p>NOTE: https://scholar.google.com/intl/en/scholar/inclusion.html#craw details on how Google Scholar's web crawlers operate.</p>
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	<p>Yes</p> <p>Details provided at https://support.lens.org/help-resources/workspaces/dynamic-collections/</p>	<p>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.</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>
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	<p>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.</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

9 of 11 students
registered were seniors





Alternatives to Web of Science

Discovery and Analysis

Web of Science

“Web of Science, previously known as Web of Knowledge, is a database of bibliographic citations of multidisciplinary areas that covers the various journals of medical, scientific, and social sciences including humanities.” Science Direct Topic Index for [Web of Science](#)

The screenshot displays the Web of Science interface. At the top, the Clarivate logo is on the left, and 'English' and 'Products' are on the right. Below the logo, the 'Web of Science' title is followed by 'Search', 'Marked List', 'History', and 'Alerts'. A user profile for 'Denice Lewis' is visible in the top right. The main search bar contains the query 'dielectrophoresis (Topic) and "cell separation" (All Fields)'. Below the search bar, there are buttons for 'Analyze Results', 'Citation Report', and 'Create Alert'. The results section shows '292 results from Web of Science Core Collection for:'. On the left, there are filters for 'Refine results' (with a search box), 'Quick Filters' (Review Articles: 27, Early Access: 1, Open Access: 90), and 'Publication Years' (2022: 2, 2021: 24, 2020: 29, 2019: 19, 2018: 11). The main results area shows two entries. Entry 1 is 'A Continuous Cell Separation Chip Using Hydrodynamic Dielectrophoresis Process' by Doh, J and Cho, YH, published in Jan 2005 in TRANSACTIONS OF THE KOREAN SOCIETY OF MECHANICAL ENGINEERS A 29 (1), pp.53-58. It has 5 references and a 'Full Text Options' button. Entry 2 is 'Research Progress on Microfluidic Chip of Cell Separation Based on Dielectrophoresis' by Chen, L; Zheng, XL; (...); Liao, YJ, published in Feb 2015 in CHINESE JOURNAL OF ANALYTICAL CHEMISTRY 43 (2), pp.300-308. It has 18 citations and 65 references. A '32' badge is visible next to the references count for entry 2.

Clarivate

English Products

Web of Science™ Search Marked List History Alerts

Denice Lewis

Results for dielectrophoresis...Results for dielectrophoresis (Topic) AND "cell separation" (All Fields)

292 results from Web of Science Core Collection for:

dielectrophoresis (Topic) and "cell separation" (All Fields)

Analyze Results Citation Report Create Alert

Copy query link

Publications You may also like...

Refine results

Search within results for...

Quick Filters

- Review Articles 27
- Early Access 1
- Open Access 90

Publication Years

- 2022 2
- 2021 24
- 2020 29
- 2019 19
- 2018 11

0/292 Add To Marked List Export

Sort by: Relevance 1 of 6

1 A Continuous Cell Separation Chip Using Hydrodynamic Dielectrophoresis Process

Doh, J and Cho, YH

Jan 2005 | TRANSACTIONS OF THE KOREAN SOCIETY OF MECHANICAL ENGINEERS A 29 (1) , pp.53-58

5 References

We present a high-throughput continuous cell separation chip using hydrodynamic dielectrophoresis (DEP) process. The continuous cell separation chip uses three planar electrodes in a separation channel, where the positive DEP cells are moved away from the central streamline while the negative DEP cells remain in the central stream ... Show more

Full Text Options View full text

2 Research Progress on Microfluidic Chip of Cell Separation Based on Dielectrophoresis

Chen, L; Zheng, XL; (...); Liao, YJ

Feb 2015 | CHINESE JOURNAL OF ANALYTICAL CHEMISTRY 43 (2) , pp.300-308

18 Citations

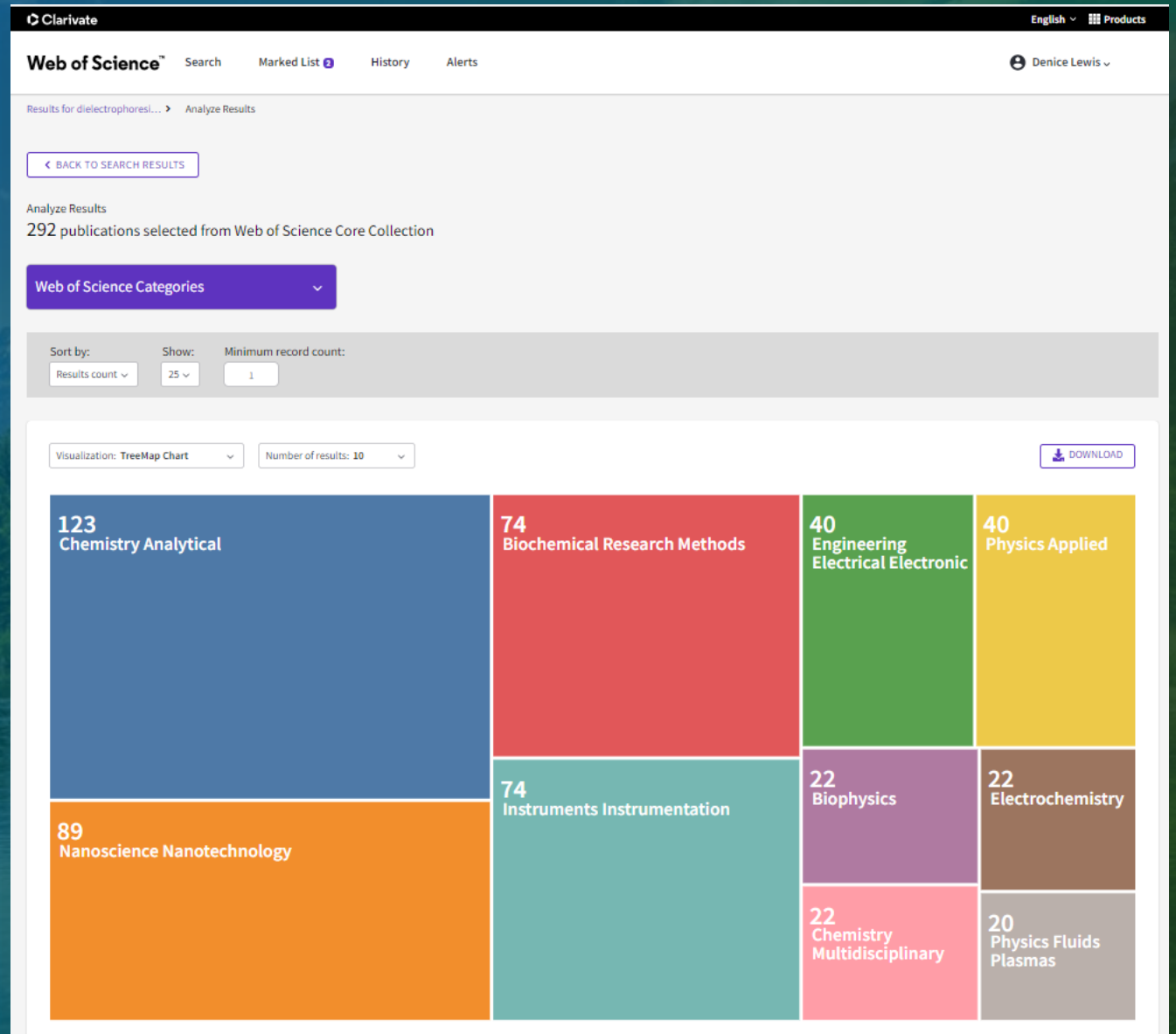
65 References

Cell separation technology is an important means for cell sorting and cell-population purification. It is the current international hotspot in biochemical analysis which is widely applied in many fields such as biology, medicine, agriculture, and environment. This review introduces the development status of cell separation using microfluidic ... Show more

Web of Science

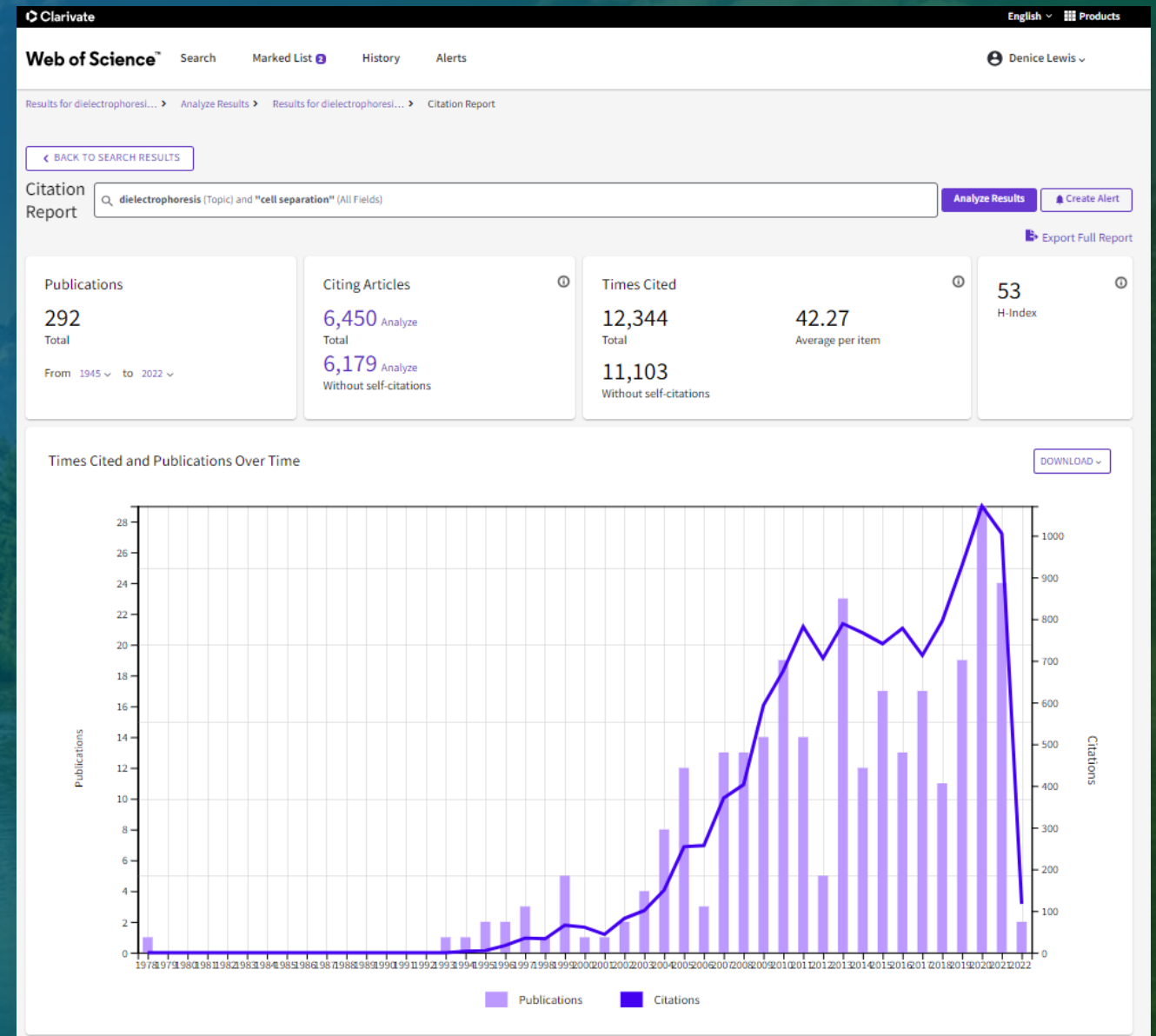
Visually analyze the results of a search by

- Web of Science categories
- Publication years
- Document types
- Authors
- Affiliations
- Publication Titles
- Publishers
- Funding Agencies
- Grant Numbers
- Open Access



Web of Science

- Conduction forward and backwards citation research on an article or conference proceeding
- Run a citation report to view the trends for a given research topic/search



The Lens a.k.a LENS.ORG

LENS.ORG

English | Our Apps | Pricing | About | Guest Work Area | Register / Sign in | Support

570 Scholarly Works

dielectrophoresis AND "cell separation" Search

Scholar Search Results

Scholarly Works (570) = dielectrophoresis AND "cell separation"

Filters: No filters applied

Scholarly Works	Works Cited by Patents	Citing Patents	Patent Citations	Works Cited by Scholarly	Scholarly Citations
570	165	987	1,391	476	24,193

Scholarly Works | Citing Patents

Table | List | Analysis

Expand | Customise List | Save as Query | Share | Export | Show Analysis | Sort by Relevance

☐ Electrodeless dielectrophoresis for DNA trapping and cell separation

Unknown Document | Volume: 2003, Mar 1, 2003

Authors: Chia-Fu Chou

Citing Patents: 0 | Citing Scholarly Works: 0 | Reference Count: 0 | 057-703-155-901-065

3013871023 | WorldCat

Additional Info: Field of Study

☐ Dielectrophoresis based integrated circuit fluidic biological cell separation

Dissertation | 2002

Authors: Youlan Li

Citing Patents: 0 | Citing Scholarly Works: 1 | Reference Count: 0 | 008-745-395-755-923

2791396483 | WorldCat

Additional Info: Field of Study

☐ Screen-printed microfluidic dielectrophoresis chip for cell separation

Journal Article | Biosensors & bioelectronics, Volume: 63, Pages: 371-378, Aug 4, 2014

Authors: Hongwu Zhu, Xiaoguang Lin, Yong Su, Hua Dong, Jianhua Wu

Show 10 Results | 1 2 3 4 5

Feedback

- Search patents, scholarly literature, as well as biological sequences in patents
- Learn more about The Lens
- Free!



Alternatives to SciFinder-n


Visualizing Citation Research


SciFinder-n


Description



CAS

SciFinderⁿ


 Saved and Alerts


 History


 Account


 You can now use [BLAST search](#) to mine our newly enhanced collection of more than 500M proteins and nucleotides from 60+ patent authorities dating back to 1957. Plus [visually review sequence similarity and frequency](#) across your patent search results. 


Searching for...


 All


 Substances

 Reactions

 **References**

 Suppliers


 Biosequences


 Retrosynthesis

References

Search by Keyword, Substance Name, CAS RN, Patent Number, PubMed ID, AN, CAN, and/or DOI. [Learn More](#)

Enter a query...


 Draw



-


Author Name

Enter last name, first name middle name.

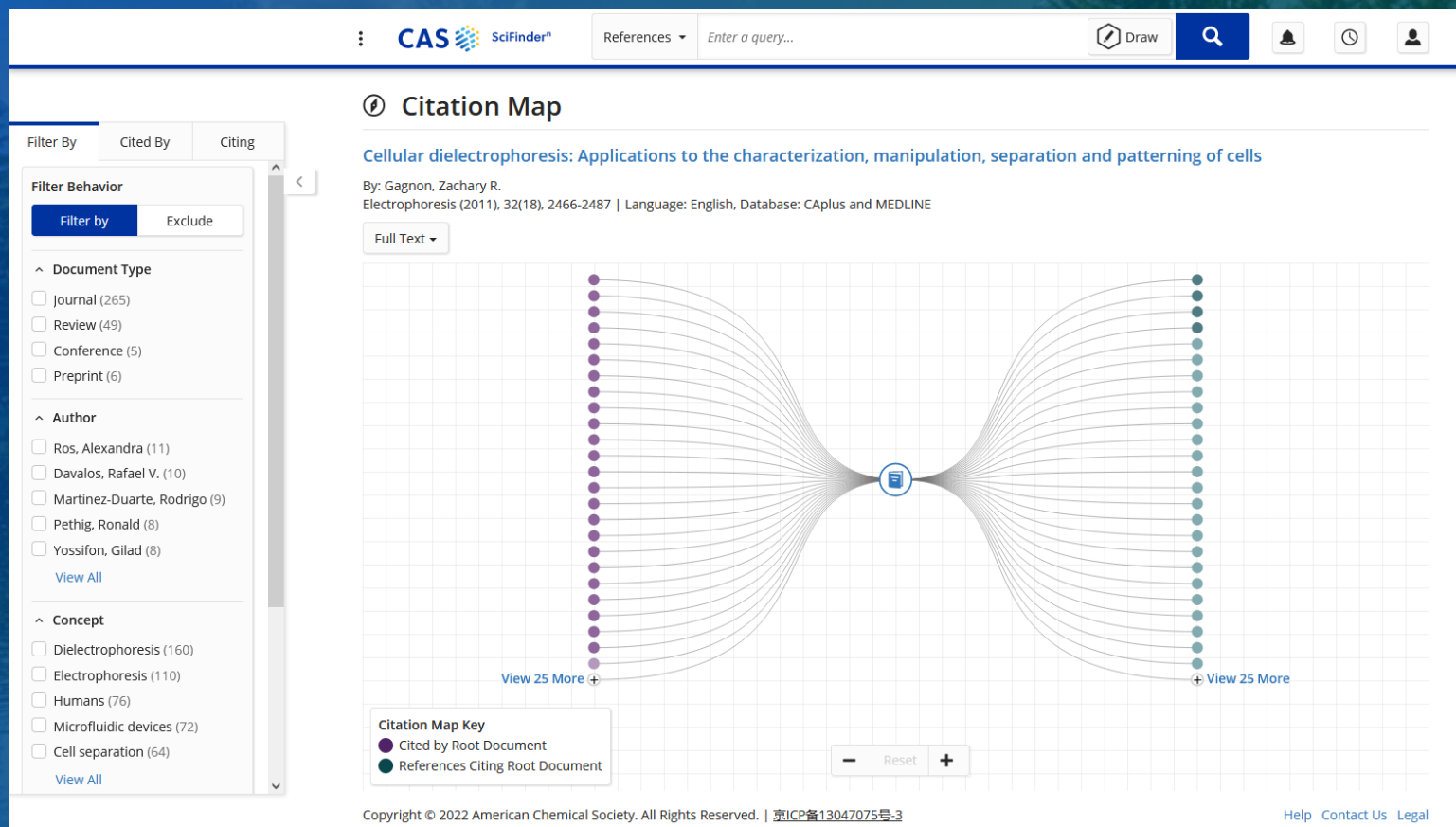


Example: Schubert, J A

[Learn more about SciFinderⁿ Advanced Search.](#)

 Add Advanced Search Field

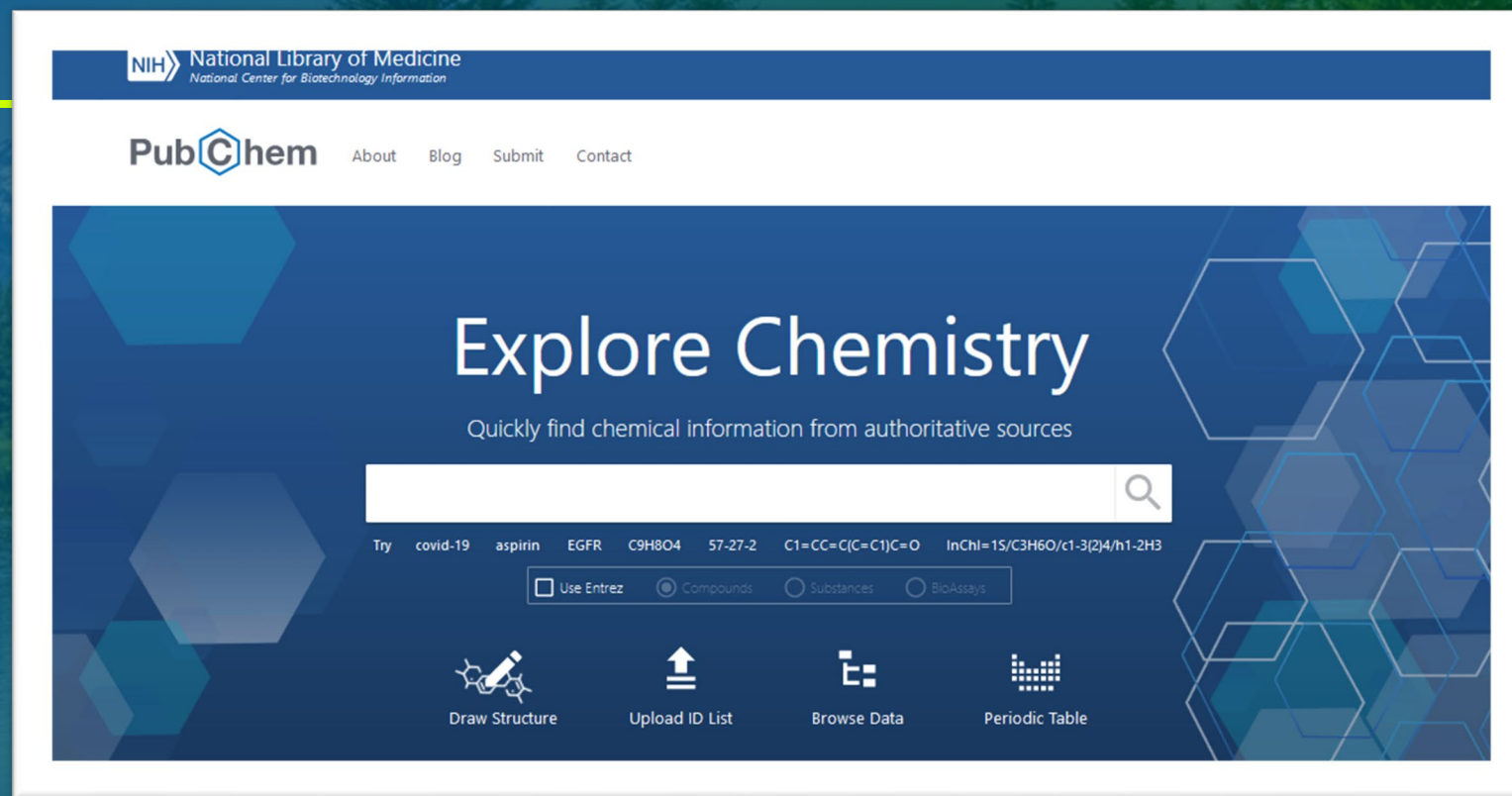
SciFinder-n



- Literature search
- Citation map

PubChem

- Explore compounds, substances, bioactivities, literature and data sources
- About PubChem
- NLM vides on PubChem
- Free!

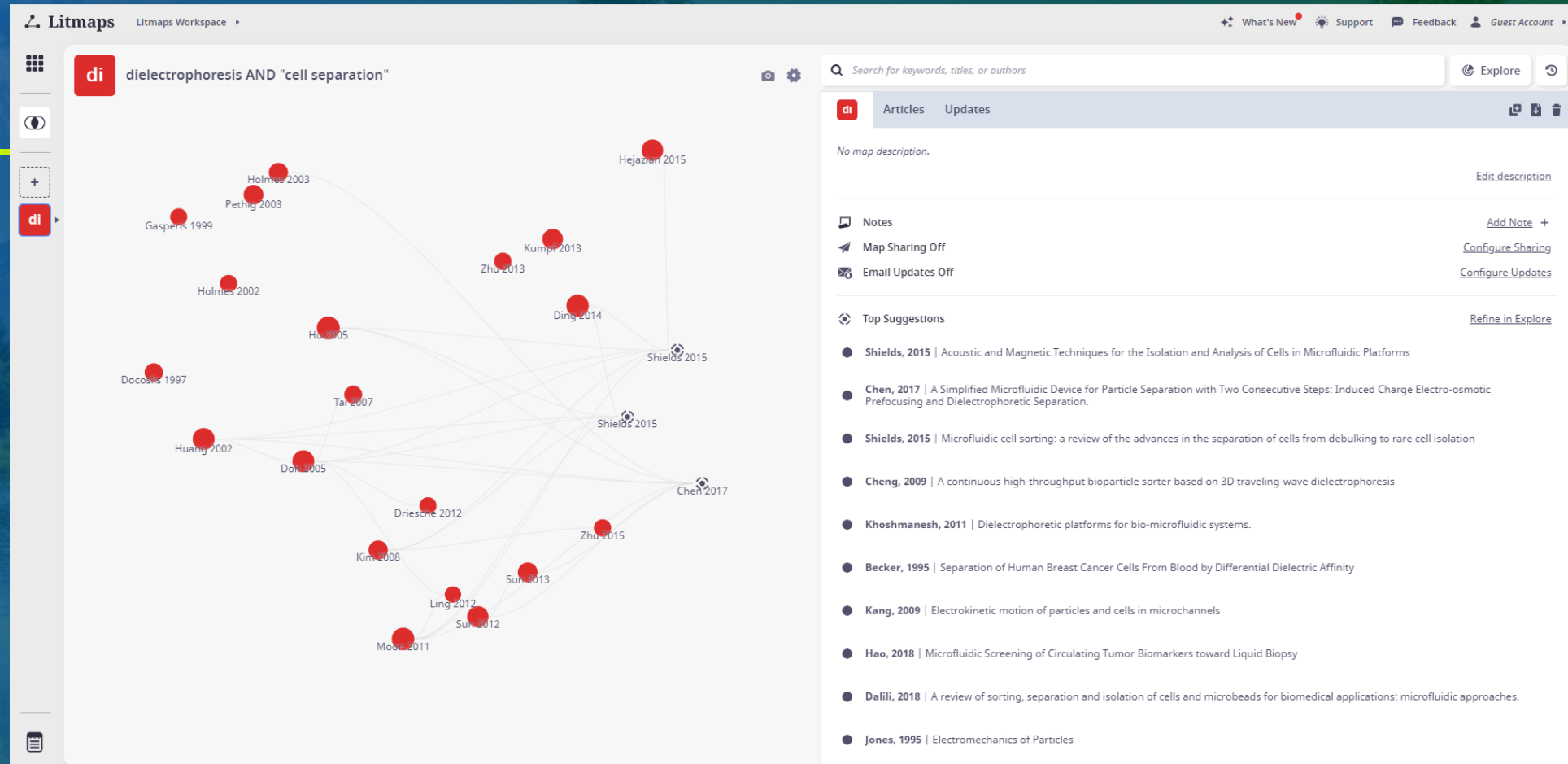


- Visual representation of similarity between papers
- Utilizes co-citation and bibliographic coupling
- How it works . . .
- Free!

Conducting STEM Research Utilizing Open Access Tools

LitMaps

- a.k.a. Literature Maps
- Dynamically visualize a citation network
- Combines multiple topics on a single map
- How to use it . . .
- Case study using LitMaps to conduct a literature review
- Free!





Other cool tools

Things that make you say “Hmmm...”



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... [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 Scholar](#) [Pub Med](#) | [Publisher](#) | [Full Text from LibKey](#) |

Paper Filters ⓘ

Keywords

Min Distance



Max Distance



Min Year

2015

Max Year

2015

Filter

Add Papers to the Graph

Paper Title or DOI



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.

Hanson, 2016

Inciteful

- A powerhouse!
- [How to use it . . .](#)
- Free!



Tools to help you accelerate your research

Build a network of academic papers and we'll analyze the network to help you discover the most relevant literature.

Search for the title of a paper to get started.



or [Import BibTeX file](#)

OR

Select two papers and we will show you how the literature connects them together.

From:

To:



Conducting STEM Research Utilizing Open Access Tools

20

scite.ai

- Smart citation statements
- See citation in context
- Unveils retractions
- Additional features . . .
- Fee based, however the browser extension is free!

The screenshot displays the scite.ai website interface. At the top, the scite_ logo is on the left, and navigation links for Product, Resources, Pricing, Blog, Sign in, and Sign Up are on the right. A search bar contains the query "dielectrophoresis AND 'cell separation'". Below the search bar, there are tabs for "Papers" and "Citation Statements", with "Citation Statements" being the active tab. The main heading is "Citation Statement Search", with a link "How does Citation Statement Search work?". Below this, there is a search bar with the same query, a "Relevance" dropdown menu, a "Set Alert" button with a bell icon, and a "Get Executive Summary" button. A row of filter categories is shown: 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. The right side displays a citation statement: "...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 is a "mentioning" section with a confidence of 99% and a link to "flag classification". The citation itself is "Biophysical Separation of Staphylococcus Epidermidis Strains Based on Antibiotic Resistance" by Jones¹, Huey², Davis³ et al. 2015. Below the citation, there are links for "Analyst", "Has correction 2015-12-2", and "Has erratum 2016". At the bottom of the citation block, there are icons for various actions: 31 (document), 3 (checkmark), 48 (circular arrow), 0 (info), and 2 (pencil). Below these icons are links for "View full text" and "Add to dashboard".

Research Rabbit

The screenshot displays the Research Rabbit web application interface. On the left, a sidebar titled 'My Collections' lists various paper collections, including 'Dielectrophoresis AND "cell separation"', 'Nuclear rocket engine', 'Cast iron skillet', 'Untitled Collection', 'Grey literature', 'On Continued Gravitational Contraction', 'Retracted paper', 'Black maternal health care disparities', 'LIB290', 'Dielectrophoresis cell separation', 'Information Literacy for Engineering', 'Information Literacy for STEM Students', and 'Water filtration'. The main panel shows a list of papers under the 'Dielectrophoresis AND "cell separation"' collection, with three papers selected. A 'Similar Work' sidebar on the right lists related papers, such as 'Ultra-fast, label-free isolation of circulating tumor cells from blood using spiral microfluidics' and 'On the design of deterministic dielectrophoresis for continuous separation of circulating tumor cells from peripheral blood cells'. A central network graph shows connections between papers and authors, with nodes representing authors and edges representing citations. The interface includes filters for 'Abstracts' and 'Comments', a 'Filter' button, and a 'Sync to Zotero' button at the bottom.

- Use for discovery
- Citation mapping and author connections
- How to use Research Rabbit to conduct research
- Free!

A scenic landscape photograph of a mountain valley. In the foreground, a calm lake reflects the surrounding scenery. The middle ground is filled with a dense forest of tall evergreen trees and numerous bright yellow wildflowers. In the background, majestic mountains with patches of snow rise against a clear blue sky.

Demo

Let me show you what I'm talking about . . .

A scenic landscape featuring a calm lake in the foreground, surrounded by large, dark rocks on the left and right. In the background, there are dense evergreen forests and majestic mountains under a clear blue sky. A small, light-colored house is visible on a hillside in the distance. The entire image is overlaid with a semi-transparent blue and green gradient.

Any questions?



THANK YOU!

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