2.

# How do we help researchers?

### **Literature Review Process**

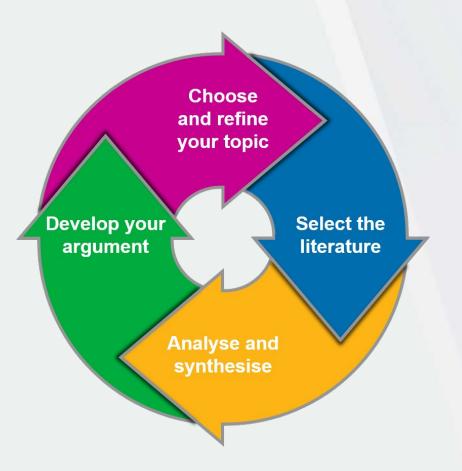
- 1. Define the research question
- 2. Determine inclusion/exclusion criteria
- 3. Choose databases and conduct the search
- 4. Review your results
- 5. Synthesize the information gathered
- 6. Analyze the information gathered
- 7. Write the literature review

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Litmaps can help here!

https://guides.lib.utexas.edu/c.php?g=1060589&p=7710319



https://www.monash.edu/student-academic-success/excel-at-writing/how-to-write/literature-review/the-process-of-writing-a-literature-review/

### **Use Cases**

- Start exploring a field
- Find research gaps
- Visualize connections

## Start Exploring a Field

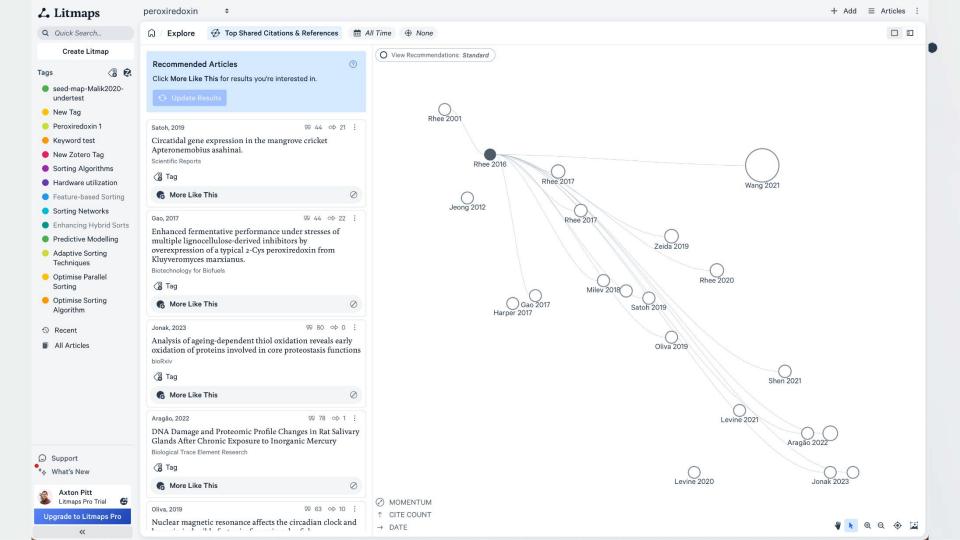
Get a "birds-eye view" of a new topic, by seeing the most important articles and how they connect.

This is great for: PhD and Masters Level

Features in Demonstration:

- Search
  - Algorithms
  - Filters
- Visualization
  - Litmap Explanation
  - Relevance

#### **L** Litmaps & Axton Pitt ) 🔠 Improving Sorting Algorithms Learn about Workspaces Q Quick Search... peroxiredoxin (2) **Deep Reinforcement Learning** Zhang, 2021 seed-map-Malik2020-undertest Create Litmap Huang 2020 8 2 Tags Guan 2020 Meyer 2014 seed-map-Malik2020undertest Sungnak 2020 **Quick Search** × New Tag Start exploring related articles on a new Litmap. Peroxiredoxin 1 Marreiro 2022 Keyword test Q Search 🚹 Import My Library Custom De la Cruz-Cano 202 New Zotero Tag Feng 2022 Q peroxiredoxin + ? Sorting Algorithms Hardware utilization 99 65 ⇔ 280 Rhee, 2016 Feature-based Sorting sorting algorithms ing Algorithms 99 65 ⇔ 280 : Rhee, 2016 Overview on Peroxiredoxin Sorting Networks Molecules and Cells 1 Enhancing Hybrid Sorts Overview on Peroxiredoxin Estivill-Castro 1992 99 79 ⇔ 227 Predictive Modelling Neumann, 2009 Molecules and Cells Peroxiredoxin 1 and its role in cell signaling Adaptive Sorting S. Rhee Techniques Cell cycle Key Paper 10.14348/MOLCELLS.2016.2368 Optimise Parallel Mankowitz 2023 99 63 ⇔ 380 Sorting Fuiii. 2002 Peroxiredoxins (Prxs) are a very large and highly conserved family of peroxidases Advances in our understanding of peroxiredoxin, a Optimise Sorting Bai 2023 that reduce peroxides, with a conserved cysteine residue, designated the multifunctional, mammalian redox protein Algorithm "peroxidatic" Cys (CP) serving as the site of oxidation by peroxides (Hall et al., 2011; Redox report : communications in free radical research Rhee et al., 2012). Peroxides oxidize the CP-SH to cysteine sulfenic acid (CP-SOH), Recent which then reacts with another cysteine residue, named the "resolving" Cys (CR) to form a disulfide that is subsequently reduced by an appropriate electron donor to 99 39 OD 1.3k Wood, 2003 All Articles complete a catalytic cycle. This overview summarizes the status of studies on Prxs Peroxiredoxin Evolution and the Regulation of peroxiredoxin and relates the following 10 minireviews. Zotero Tag Hydrogen Peroxide Signaling Science Wood 2003 Huang 2020 Karplus, 2015 55 77 ⇔ 110 Zhou 2020 A primer on peroxiredoxin biochemistry. Wrapp 2020 ui 2019 Free Radical Biology and Medicine Coutard 2020 **Explore Related Articles** 1 Selected ✓ < 1 - 10 of 77.400 > Malik 2020 Support reiro 2022 ● ◆ ♦ What's New



### 2

### **Start Exploring a Field**



https://docs.litmaps.com/en/articles/9092911-search-for-articles-in-litmaps

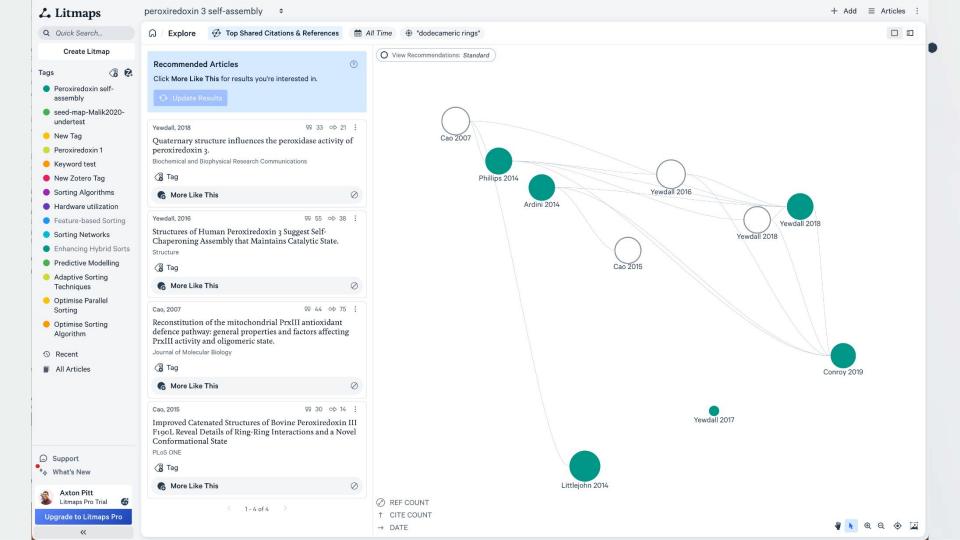
### **Find Research Gaps**

#### Researchers want to contribute to novel areas to push their field forward.

This is great for: All Researchers

#### Features in Demonstration:

- Search
  - Combine advanced techniques
- Evaluation
  - Map layouts



2

### **Finding Research Gaps**



https://docs.litmaps.com/en/articles/9092883-find-research-gaps-with-litmaps

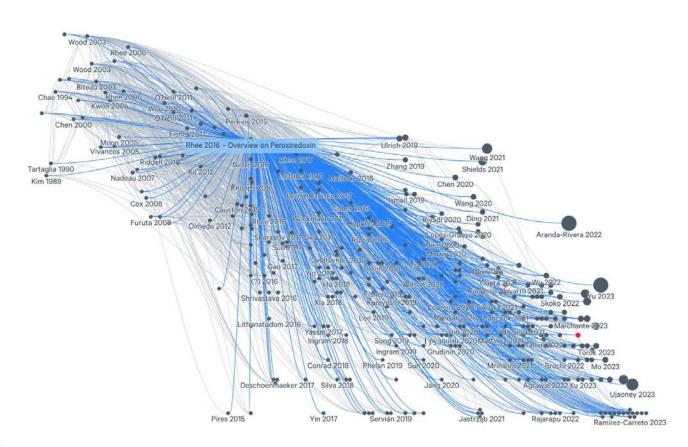
### **Visualize Connections**

### Visual literature maps help form connections and enhance understanding

Great for: Students and Professional Staff

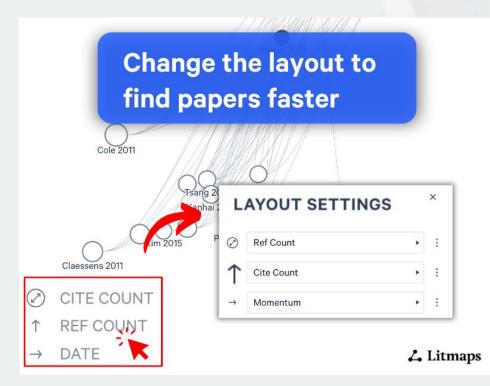
Features in Demonstration:

- Specific map modes
  - Map layouts
  - Axes
- Design mode



⊘ MOMENTUM
↑ CITE COUNT
→ DATE

### **Visualize Connections**



https://docs.litmaps.com/en/articles/9181490-understand-research-faster-visually

### **Litmaps & Your Institution**

We want to support your staff and students to use the latest technology like Litmaps to advance their work

- Pedagogical a great tool to teach undergraduate students how research works
- Enhancing graduate student success kick starting their projects and teams, and taking the pain out of writing up their thesis
- Communicate impact researches can demonstrate their work and impact

### How does Litmaps compare to other tools?

- Algorithmic choice
- Visualization to help researchers see the bigger picture
- Large corpus of publication metadata to search across
- Enables librarians to teach others to understand the literature

### Roadmap

- Login
  - SSO via university accounts via OpenAthens
  - IP based authentication via EZProxy
- Full Text Access
  - Libkey from Third Iron
- Reference Manager Sync + Import
  - Endnote
  - Mendeley
- Journal Filters



# Human + Al

### Thank you!

How to contact me:

During VALA 2024:

• Look out for me or a Litmaps shirt

After VALA 2024:

• Email: axton@litmaps.com



https://www.litmaps.com/about/for-institutions