



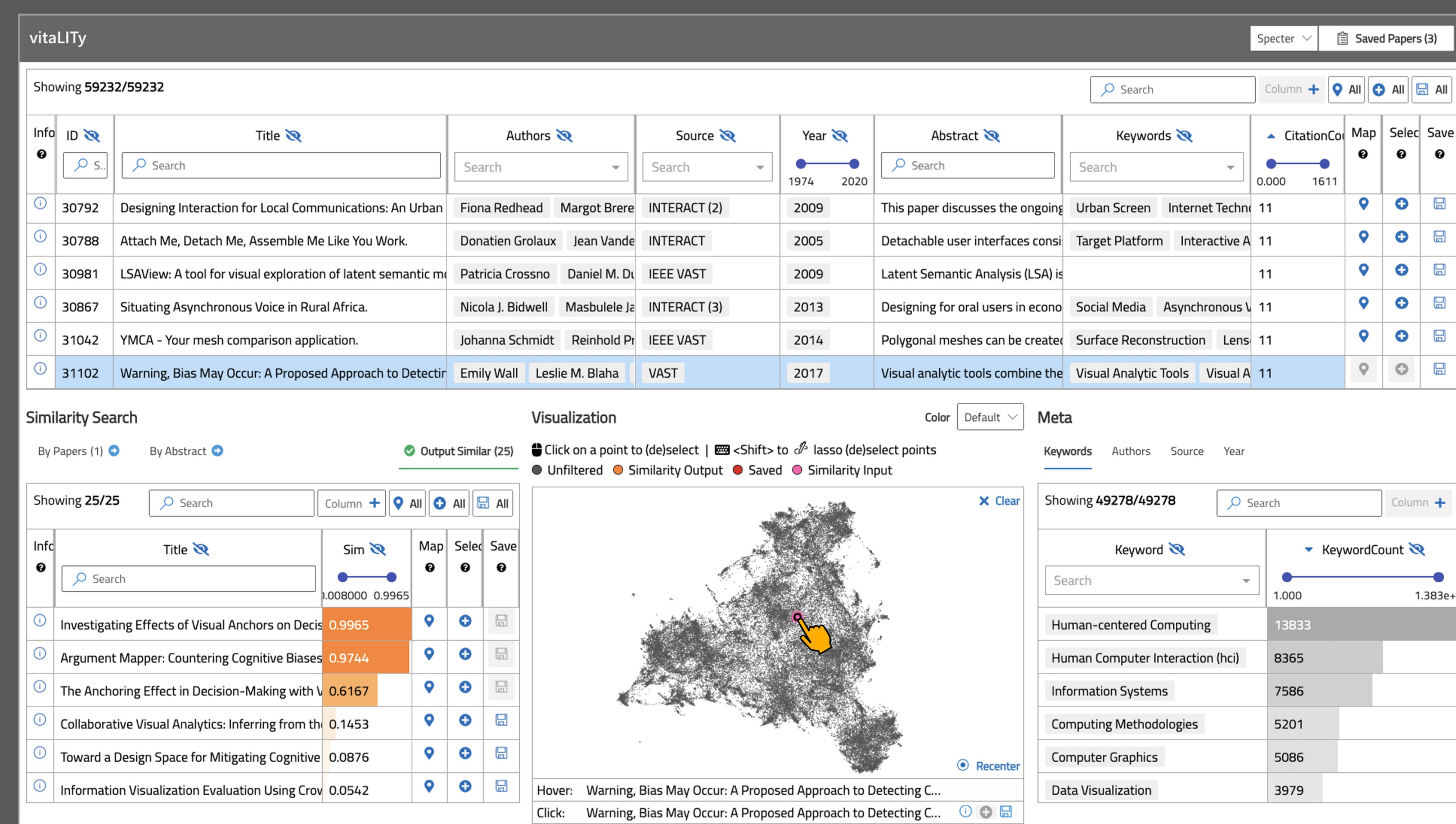
# Promote Serendipitous Discovery of Academic Literature

## Problems with Literature Reviews

- Inconsistent / missing keywords
- Less cited but relevant papers not discoverable



**Web Scrapers**   **59k VIS Papers**   **Web UI**  
 (38 VIS-research venues, 47 years, and 82k authors)



## Using Transformers & Visual Analytics,

- 1 Search by a **set of seed papers**
- 2 Search by a **working title & abstract**



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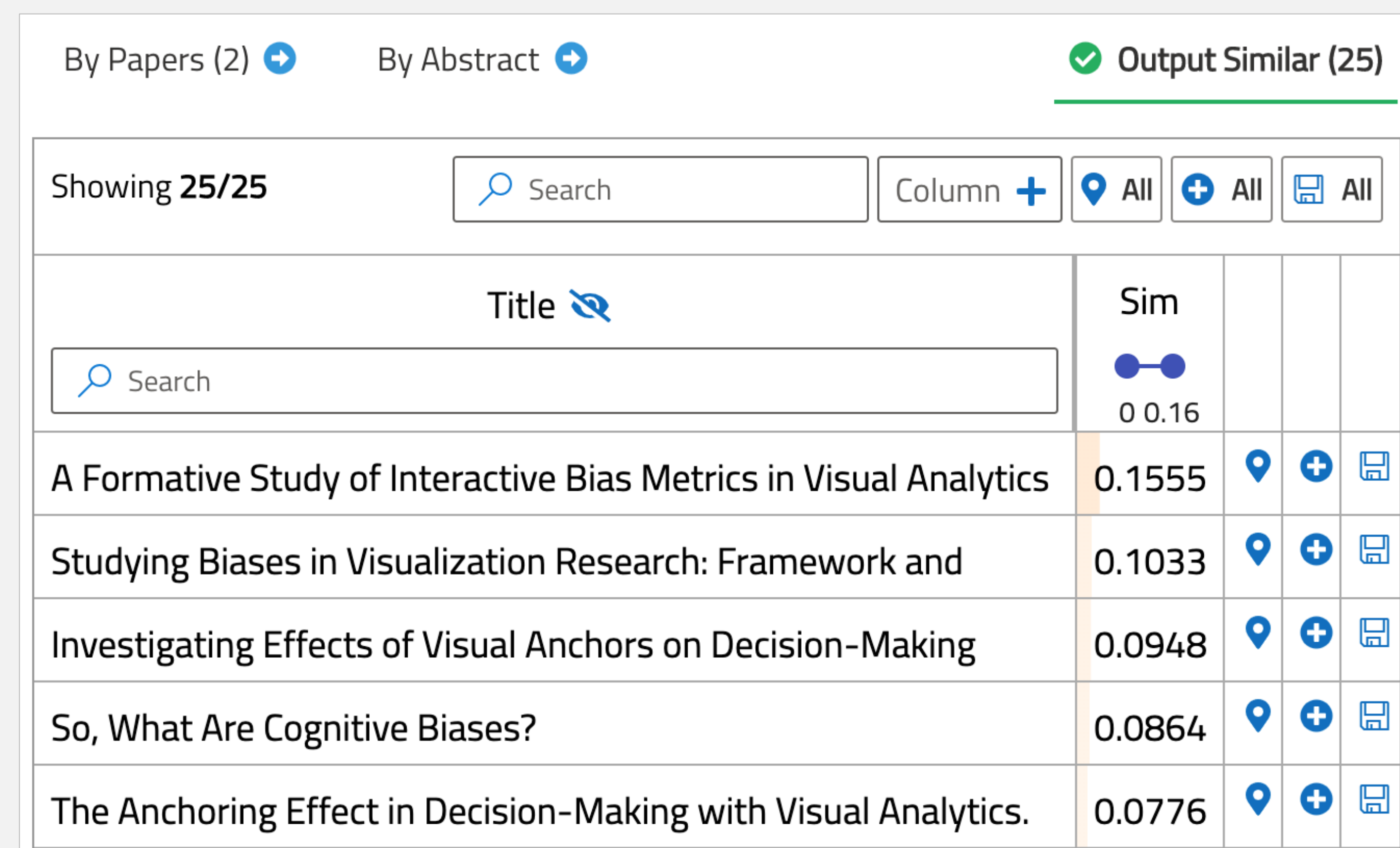
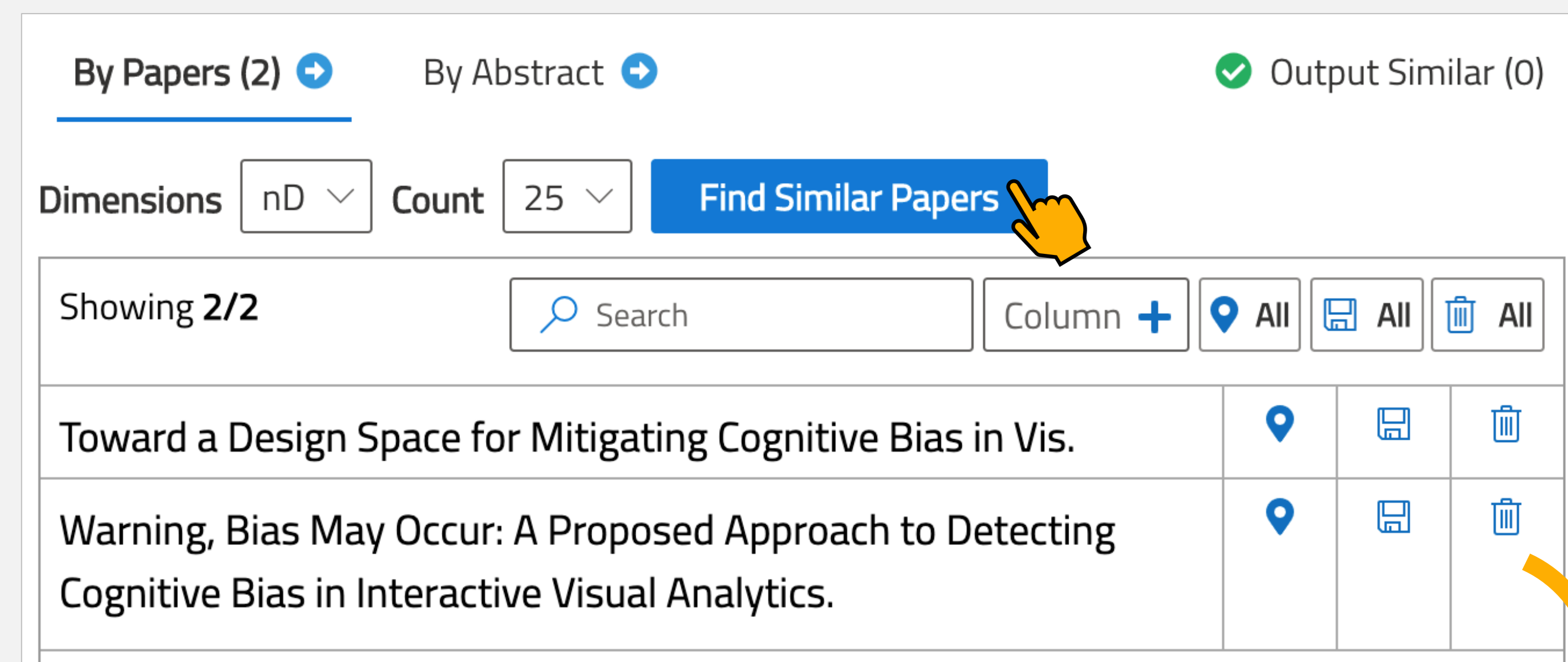
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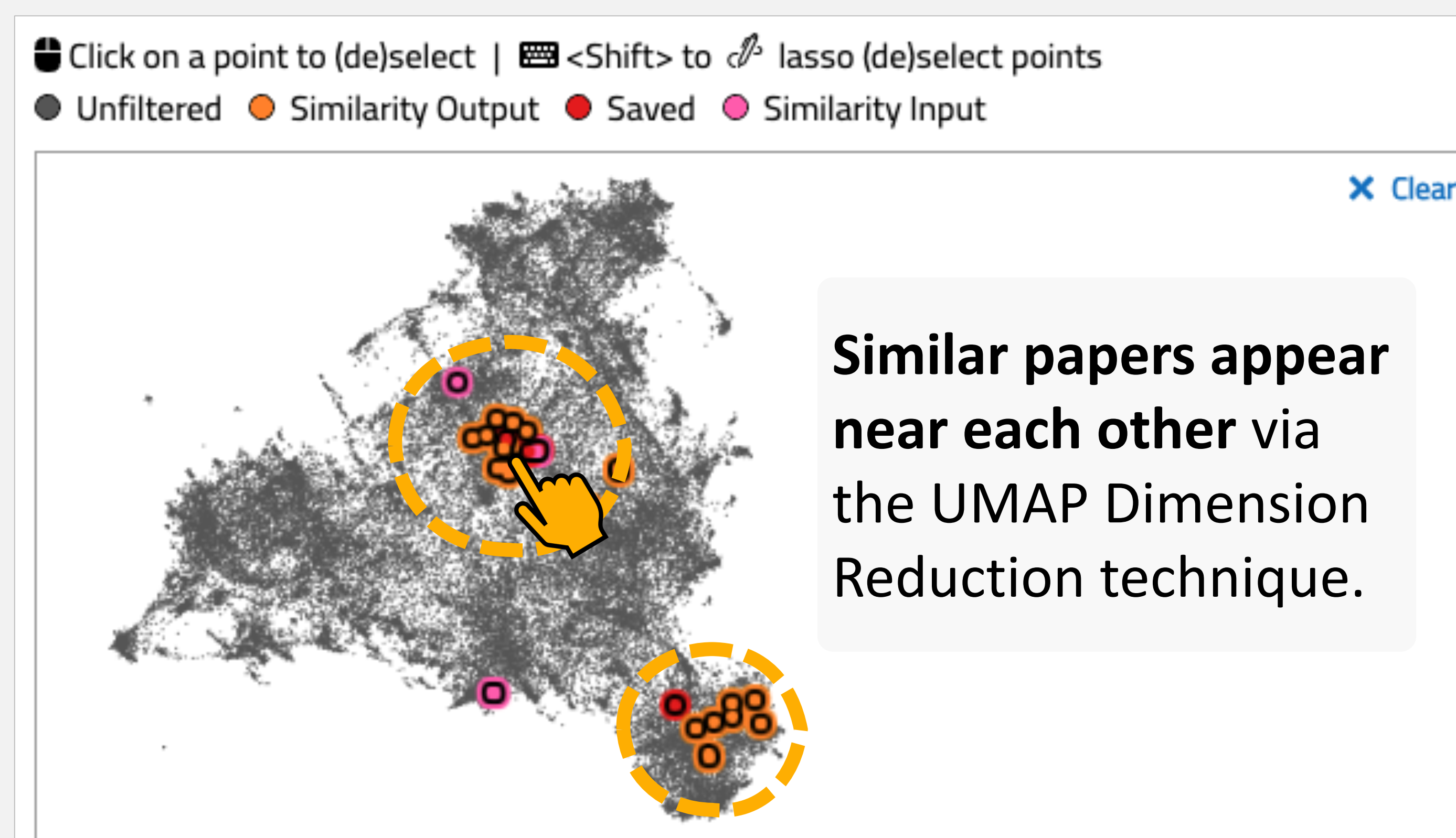


## 1 Have a Set of Seed Papers?

Find semantically related papers that do not necessarily have shared keywords **by search based on one or more known seed papers** in an **n-D** embedding space...

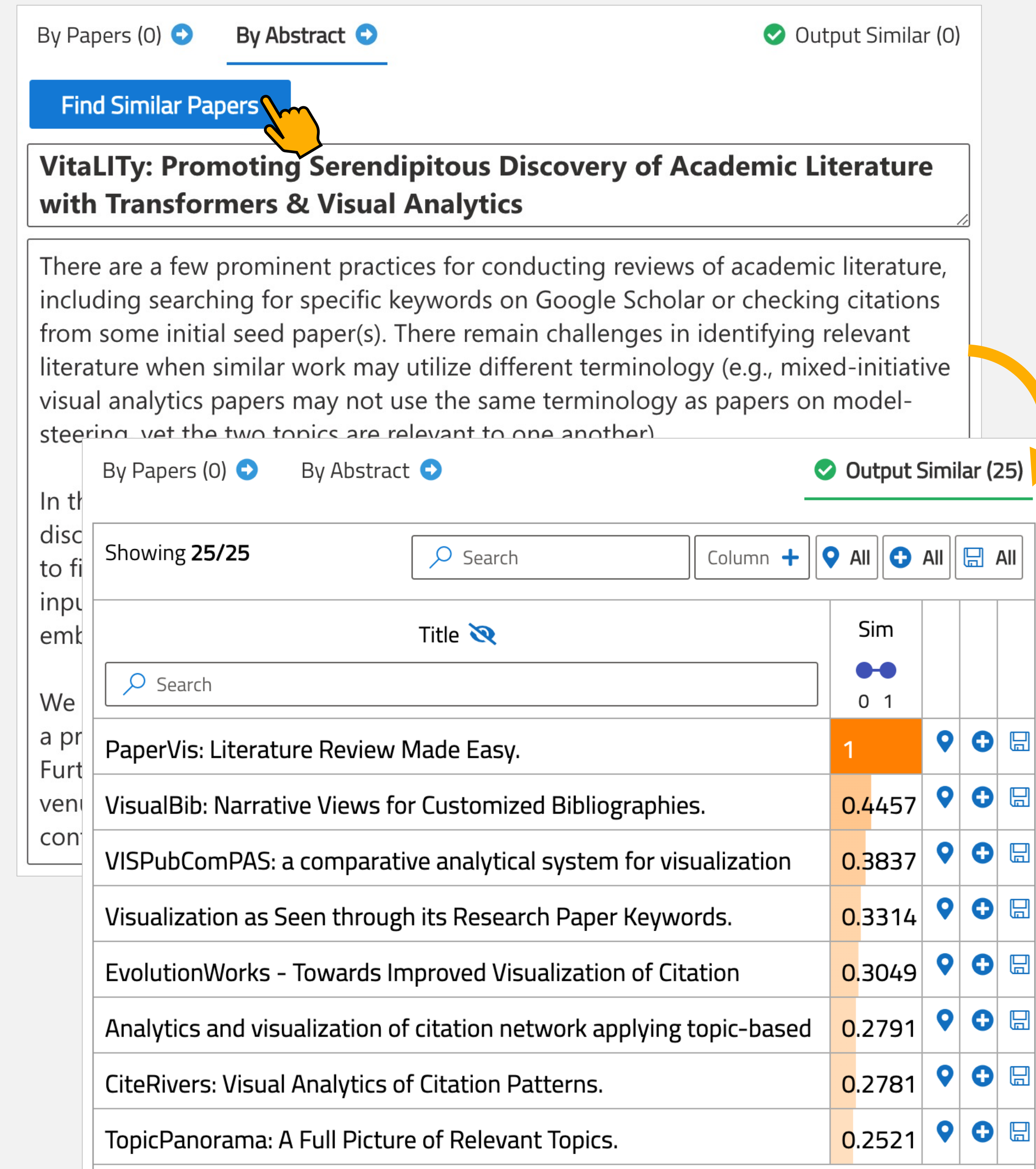


... or stumble upon some **visual exploration** in a **2-D** embedding space.



## 2 Have a Working Title & Abstract?

Find semantically related papers **by n-D search based on the author's own unpublished ideas** in the form of sentences / abstracts.

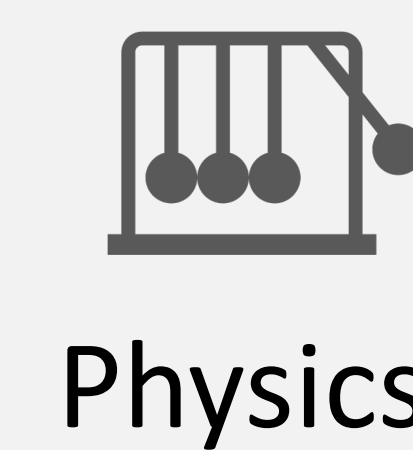


**DID YOU KNOW?** "We used VitaLITy for its own Literature Review!"

## Where else can we apply VitaLITy?

**Beyond VIS...**

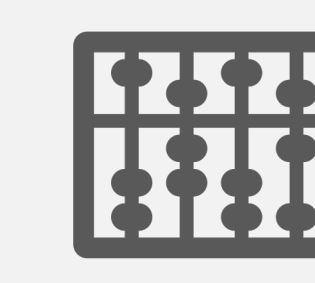
**Beyond Papers...**



Physics



Medical



Maths



Patents



Datasets



eCFR