

Iris.AI – tekoälypohjainen tiedonhaun assistentti

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TerkkoLib @ Terkko Health Hub

Helsingin yliopiston kirjasto HULib

<https://www.terkko.helsinki.fi/irisai>

Your AI Science Assistant

Let Iris.ai semi-automate the drudgery part of your research process

**FAST
COMPANY**

2017 Top 10
Most Innovative Company
in Artificial Intelligence

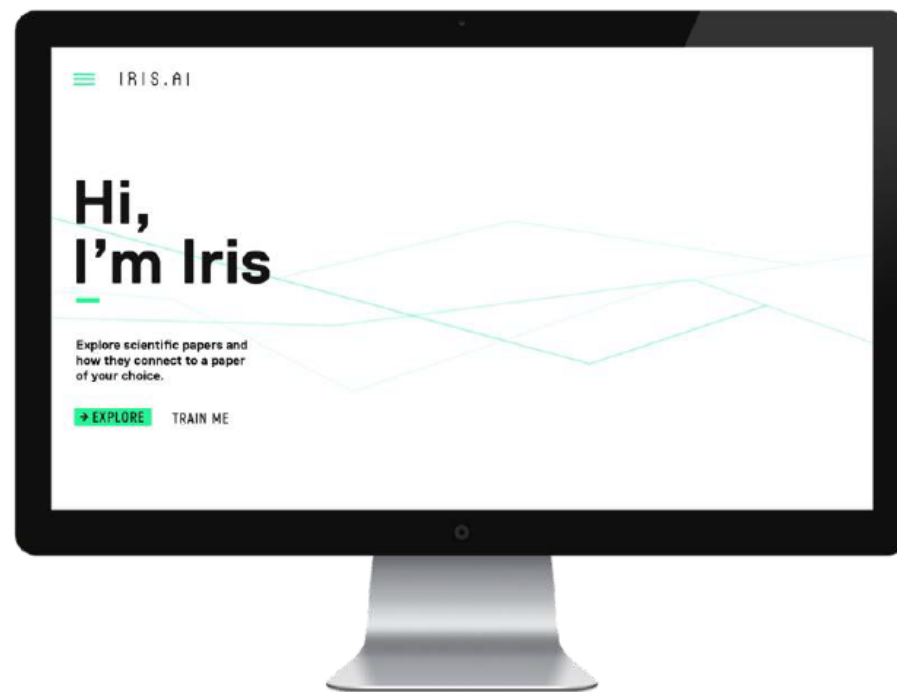
**TechCrunch
DISRUPT**

2016
London
Startup Battlefield Contestant



F FOUNDERS
FACTORY

 **Singularity**
UNIVERSITY



The problem today



More than **3000 research papers** are published daily.
Half of them are read only by a handful of people.

Science has already uncovered **an abundance of new insights**
which researchers are not surfacing well enough – yet.

So we're building an **AI to help R&D.**

Challenge with the current research tools

IRIS.AI

Finding the knowledge that combined provides an answer



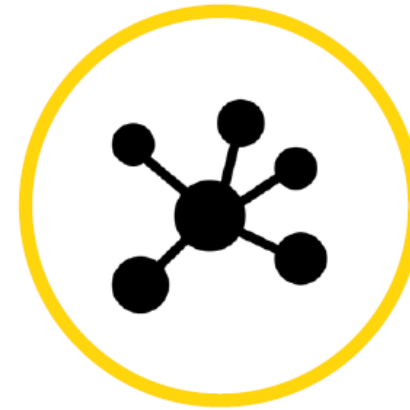
Limiting keywords

restricts you to what you know already



Endless result lists

takes forever to browse

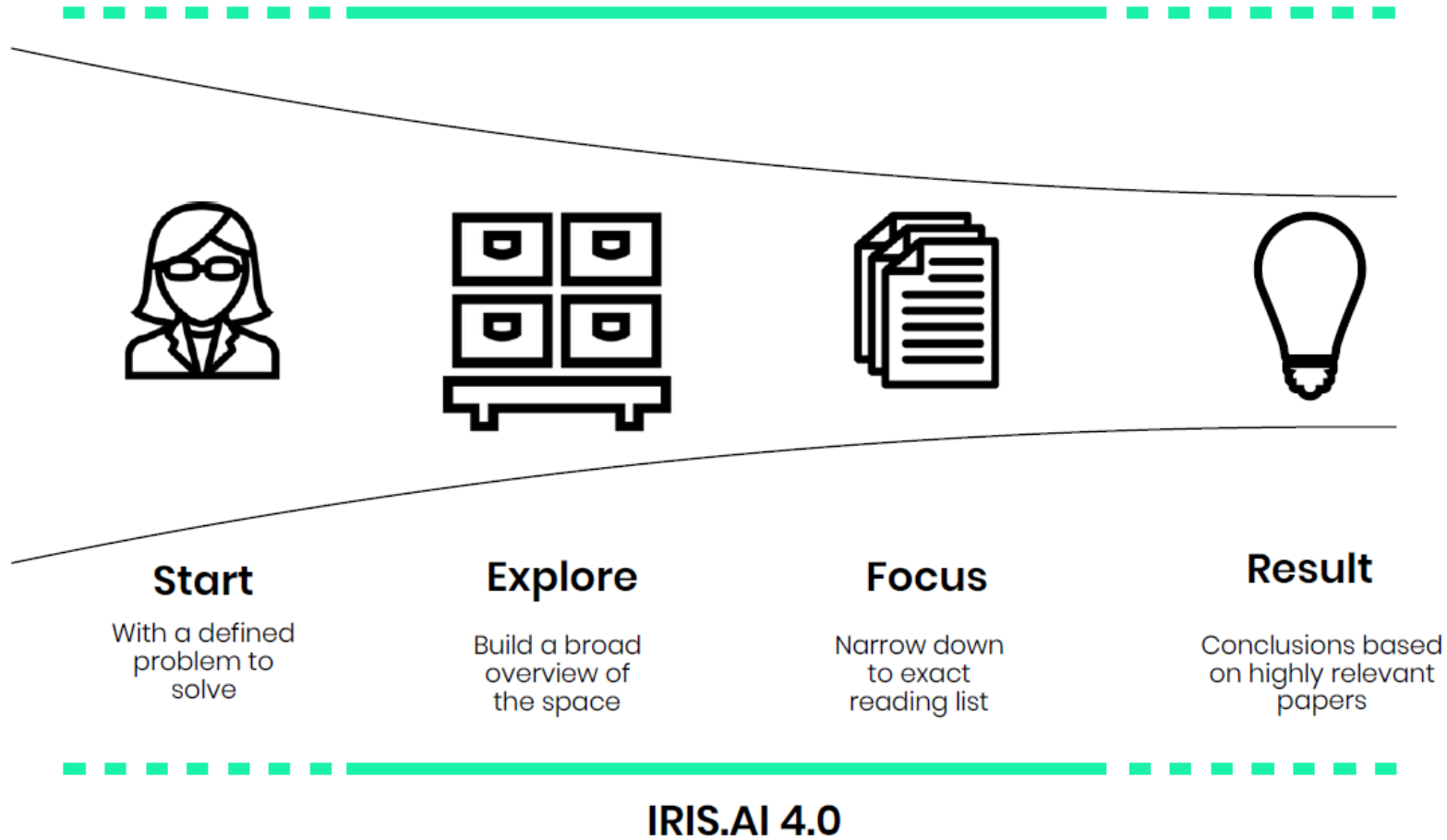


Biased citations

skews your results on popularity

Iris.ai works as your personal assistant

IRIS.AI



Iris.ai works with scientific text content

IRIS.AI

System ready to go

Iris.ai comes with access to

>127 million Open Access papers

via core.ac.uk



Connect additional databases

Paid journals via your credentials

Internal research documentation

Patent databases

Trade magazines with API access

... or other ideas? Ask!

7 hours with the Exploration Tool

IRIS.AI

Bypass limiting
keywords



Remove biases from search



Build connections across
disciplines



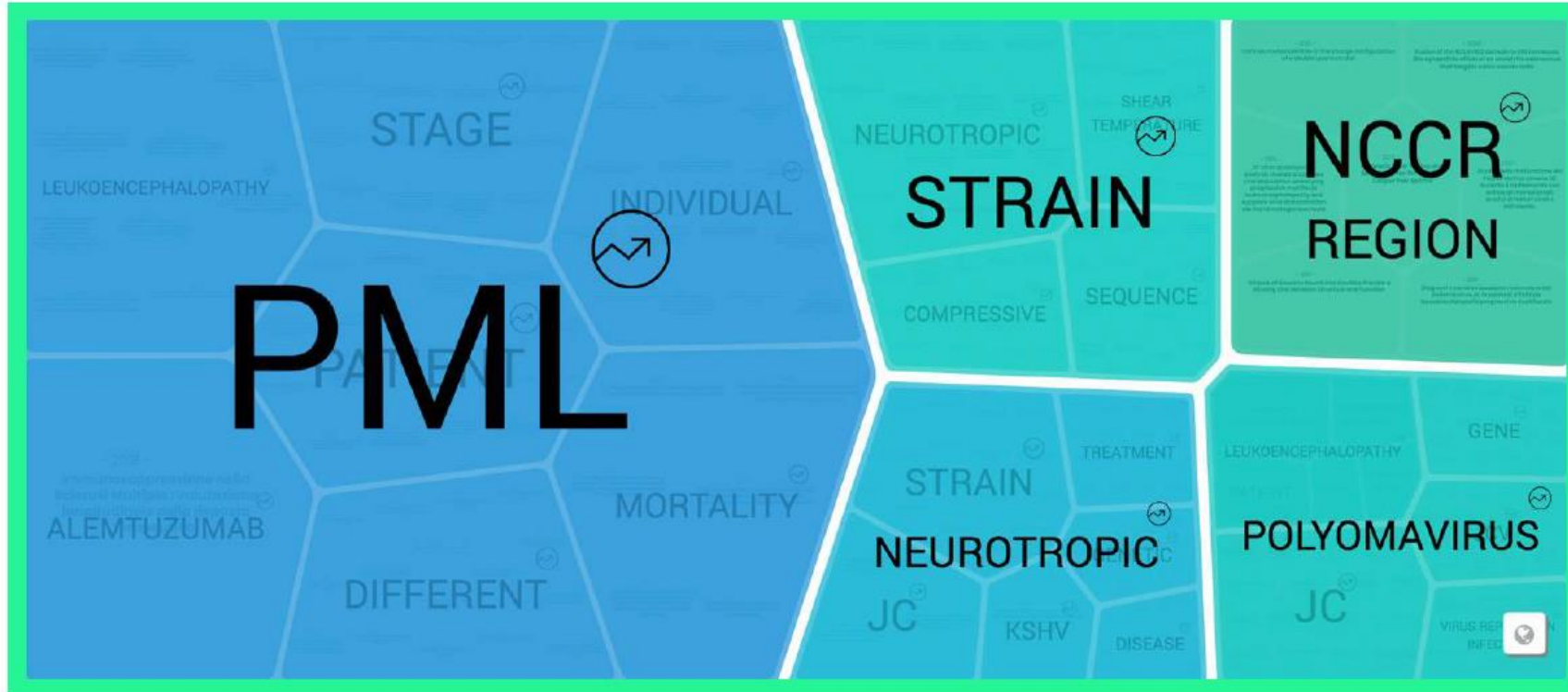
End result: 15-20 maps covering thousands documents,
and a new overview of all fields.

How to write a problem statement

- Draft a description in **300–500 words** in English
- Include the background of the problem, clear research questions and a description of your goals
- Explain specific concepts and abbreviations as you would explain to a friend
- If certain concepts don't get enough weight, go back and add more background. Try again.

7 hours with the Iris.ai Exploration Tool

IRIS.AI



Input your own problem statement to navigate the visual interface.

End result: 15-20 maps covering thousands documents, and a new overview of your problem area.

I've found this paper for you in: [heritage](#) > [natural](#)

CLOSE X


- 2008 -

Approaches to Semantic Markup for Natural Heritage

Cui, Hong



Bookmark Full text link Find related papers

Relevancia:  58%

Abstract

The theme of this paper is the application of automated semantic markup techniques on natural heritage literature to address information needs of taxonomists. Two machine learning based techniques (supervised and unsupervised machine learning) are discussed and compared on a real world corpus. A prototype application that supports batch and online modes of converting free text documents to XML format is described

Details

Journal Title:

Identifiers:

oai:www.ideals.illinois.edu:2142/15094

Publisher:

LCC Subject Category:

Language of fulltext:

English



IS THIS PAPER RELEVANT TO YOUR RESEARCH?

YES

NO

How do human genes work as heritage objects?

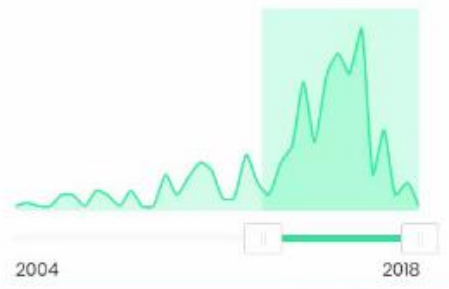
I've identified 375 related papers and grouped them by concept.



ALL

APPLY 1 FILTER

By range of paper published date



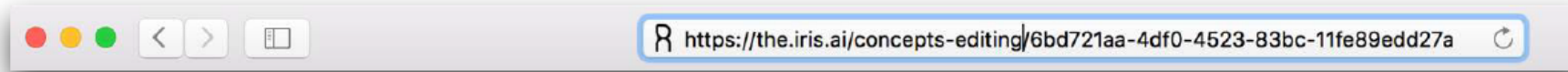
- select filter
- select filter
- Use these repositories
- Remove these repositories



Hierarchy Editor

IRIS.AI

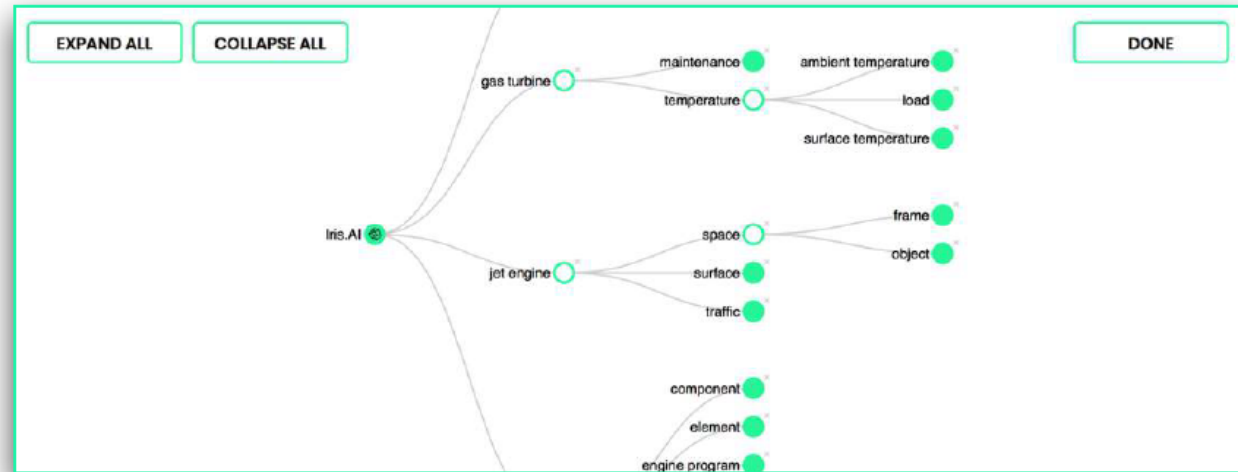
- To edit the structure, insert **concepts-editing** to the map URL



- Click “Expand All” button to see all the concepts
- Click the circle, drag and rearrange the concepts to change their relation to

other concepts

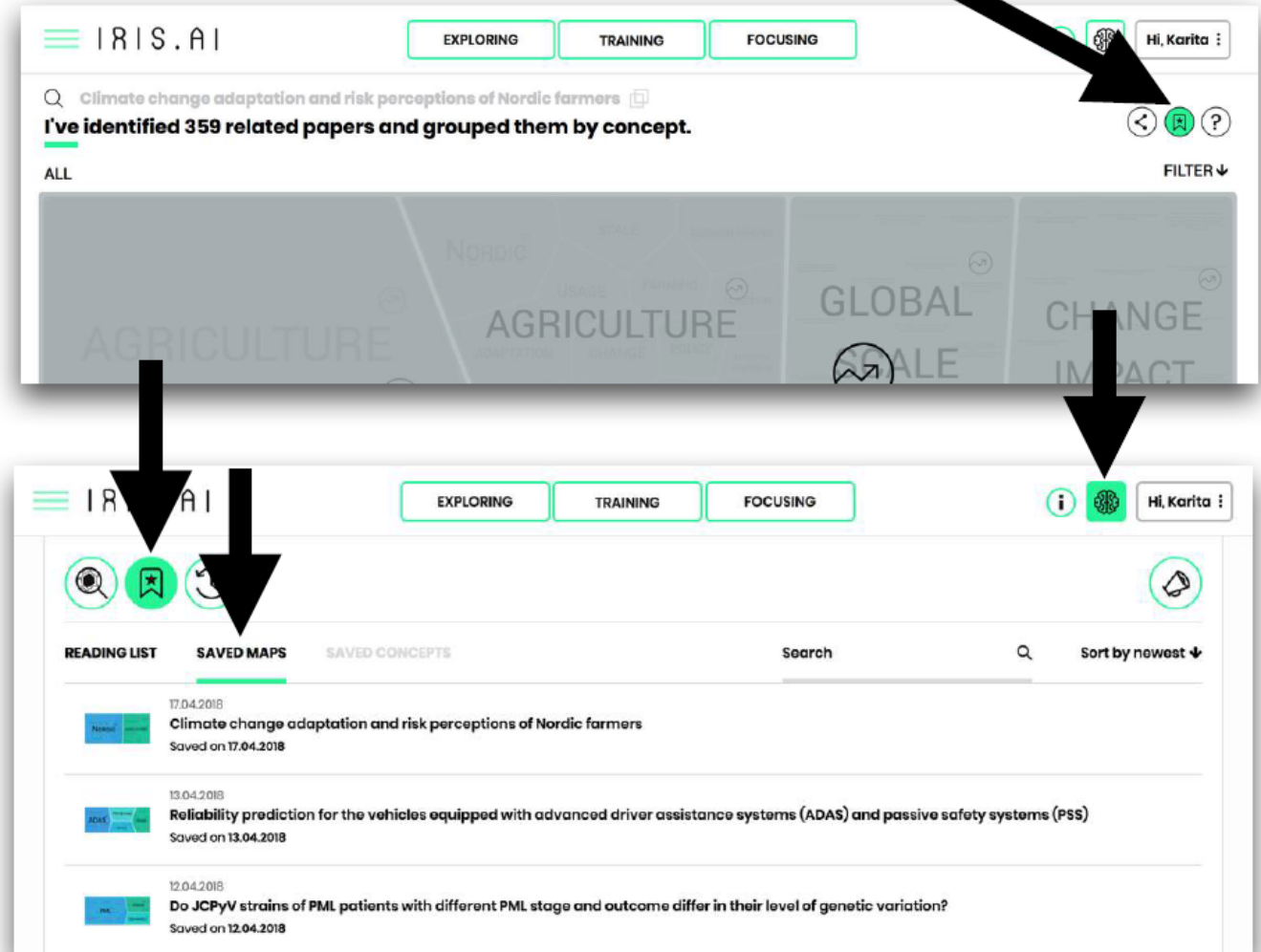
- Choose alternative words for each concept by clicking concept name



- Delete concepts by clicking X

Bookmarking maps

- 1) Click on the bookmark icon to save the map
- 2) Click brain icon to see dashboard
- 3) Go to Bookmarks
- 4) Open tab "Saved Maps"

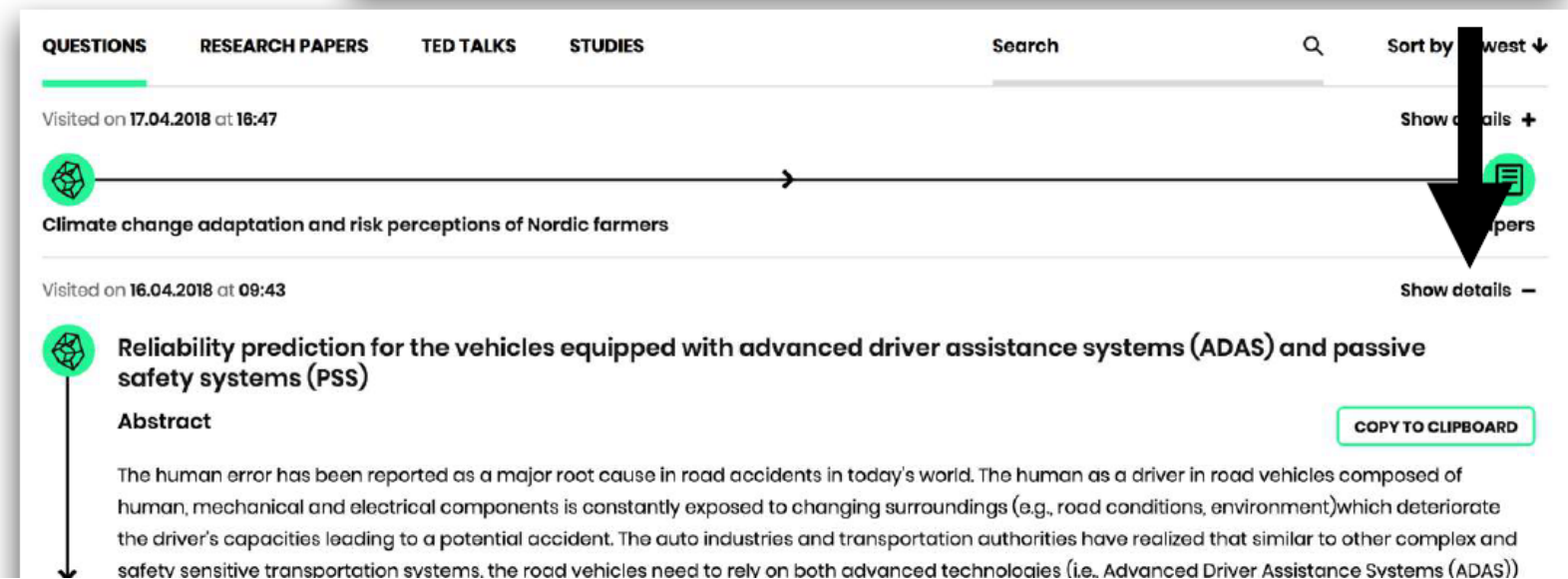
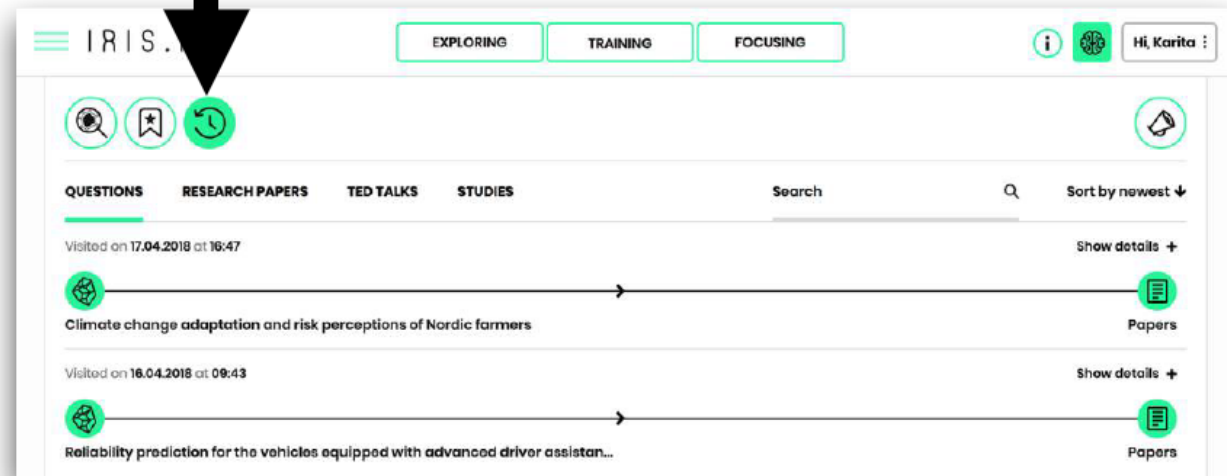


Search history & dashboard

IRIS.AI

1) On the dashboard, click history icon

2) Click "Show details +" to view the original research question and problem



7 hours with the Iris.ai Focus Tool

IRIS.AI

The screenshot displays the Iris.ai Focus Tool interface. The main area shows a list of research papers under 'Stage 2'. The interface includes a search bar, a 'Sort alphabetically ascendant' dropdown, and buttons for 'INCLUDE / EXCLUDE', 'Hide verified papers', and 'COMPLETE'. The sidebar on the right, titled 'Analysis Monitor', shows the current stage as 2, with 208 papers included out of 437 total. A progress indicator shows 97% faster results, and a 'MANUAL SCREEN' button is visible at the bottom.

Paper title	Published on	Written by
Active debris multi-removal mission concept based on hybrid propulsion	2014	P. Tadini, Tancredi U...
Active flow control in an advanced serpentine jet engine inlet duct	2009	Kirk, Aaron Michael
Advanced Life Assessment Methods for Gas Turbine Engine Components	2014	Cuffaro, Vincenzo, Curà, Francesca...
A Model for Converting Dilatometric Strain Measurements to the Fraction of Phase Formed During the Transformation of Austenite to Martensite in Powder Meta ...	2009	Warke, Virendra S., Sisson, Richard D...
An advanced multiconfiguration stator well cooling test facility	2012	Coren, Daniel, Turner, James...
Analysis and Connection of Lightweight CFRP Sandwich Panels for Use as Floor Diaphragms in Structural Steel Buildings	2014	Kaiser, Richard Lawrence, Kaiser, Richard Lawrence
Analysis and fabrication of paraboloidal CFRP sandwich mirrors.		

Narrow down from thousands of research documents based on your inclusion/exclusion criteria.

End result: A precise reading list of the most relevant documents.

Import papers from Exploration maps

IRIS.AI

1) Write a study title for your own reference

2) Click “Start a new mapping study” and “Import data from bookmarks”

3) Select bookmarked maps that you want to import and click “Done”

The screenshot displays the IRIS.AI interface during the 'Stage 0' setup phase. The main screen shows a 'You're about to start a focusing study!' message and a 'START NEW MAPPING STUDY' button. Two modals are overlaid: one for selecting the data source (MY ACCOUNT or REMOTE) and another for selecting specific data to import from a list of bookmarked maps.

Stage 0

You're about to start a focusing study!

Just click on the button below and you're good to go.

Give your Focusing Study a title

problem statement

START NEW MAPPING STUDY

Specify the data to be imported location.

Here you can choose between already saved concept maps from your account or remotely shared location in Google Drive.

MY ACCOUNT **REMOTE**

Saved maps contain collection of documents related to your previous searches.

IMPORT DATA FROM BOOKMARKS

Select from the list below the data to be imported

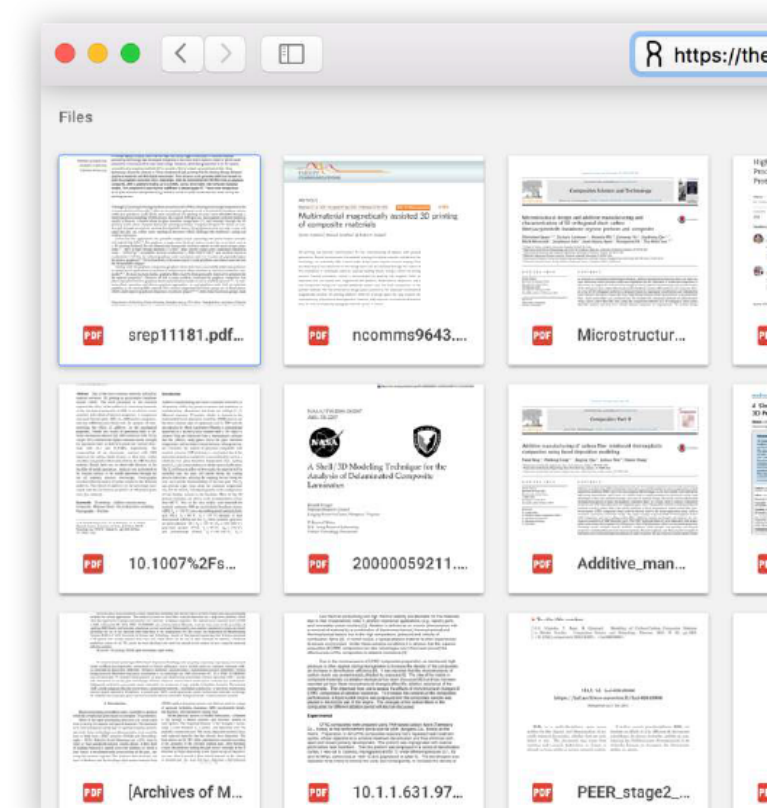
Search **SELECT ALL** **DESELECT ALL**

- 17.04.2018 Climate change adaptation and risk perceptio...
Saved on 17.04.2018
- 17.04.2018 Reliability prediction for the vehicles equipped ...
Saved on 12.04.2018
- 12.04.2018 Do JCPyV strains of PM1 patients with different ...
Saved on 12.04.2018
- 10.04.2018 Do JCPyV strains of PM1 patients with different ...
Saved on 10.04.2018

DONE **CANCEL**

Import your own data collection

- Choose Remote Import at the start of a Focusing Study
- Create a Google Drive folder for the documents
- Folder should contain PDF or text documents
- Minimum of 30 documents
- Share the folder with noreply@iris.ai
- Create a link with a sharing option:
“**Anyone with the link can view this file**”
- Paste link to Focus tool



Include & Exclude to narrow down the reading list

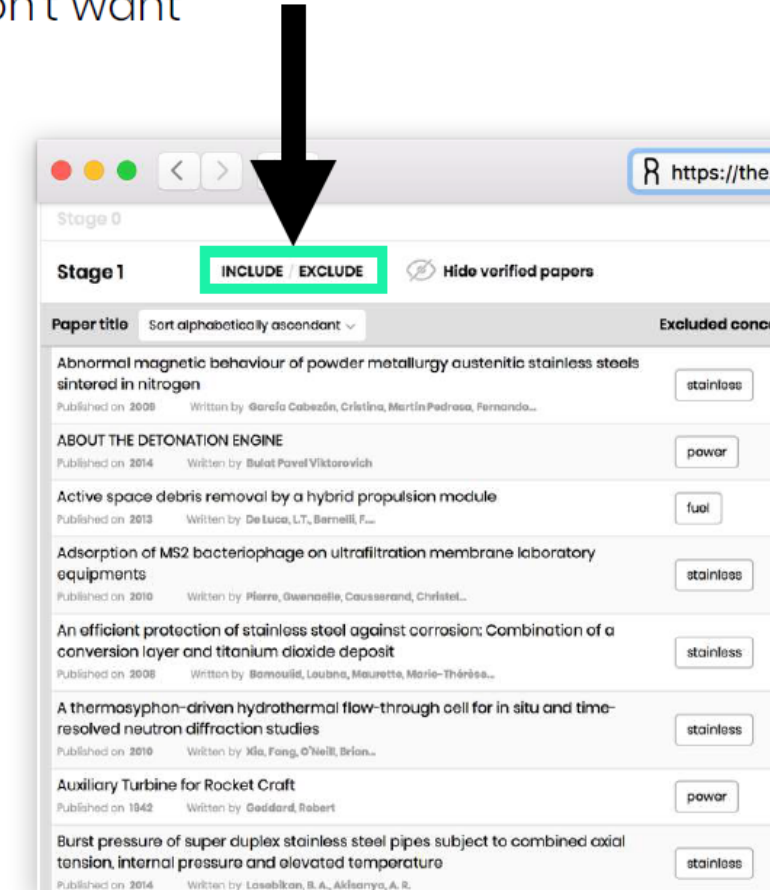
IRIS.AI

Stage 1:

- Exclude papers based on keywords that you don't want to see in the final result list
- Include only the keywords that are essential
- Start from Highly Ranked words

Stage 2:

- Papers are grouped under different topics
- Exclude & include papers based on topics that aren't and are relevant for you
- Start from Specific & Current topics



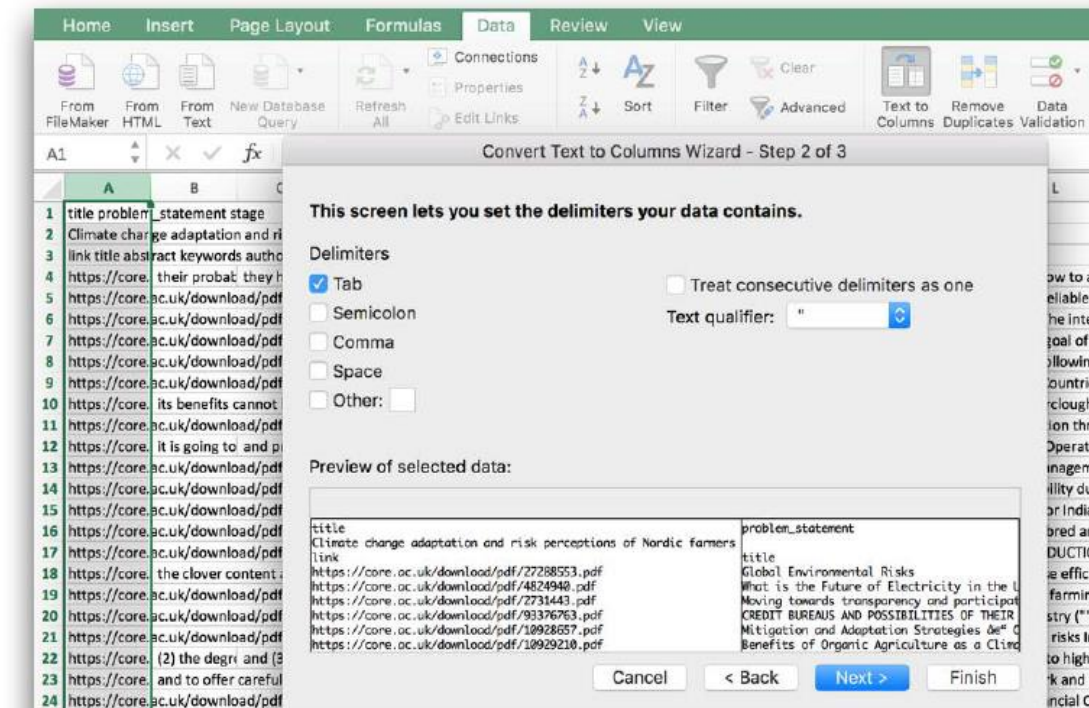
Export results

Stage 3: Export results

- When you've completed the focusing study, you can export the list as a CSV file
- Click "Export" on the Analysis Monitor box and save the file

Clean up the CSV file:

- Select the first column in Excel
- Go to tab "Data"
- Open "Text to Columns" wizard
- Use "Tab" as a delimiter



Other benefits of the Iris.ai tools

IRIS.AI

Fewer misses



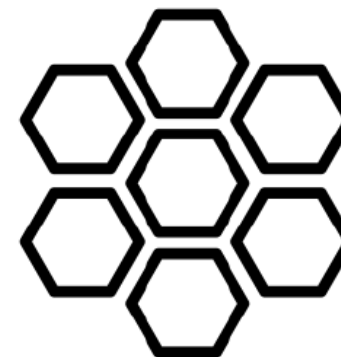
Find relevant knowledge with an increased precision level

New ideas



Make ground-breaking interdisciplinary discoveries

Simple visual navigation



Explore the papers organised in AI-built categories

Get in touch!



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