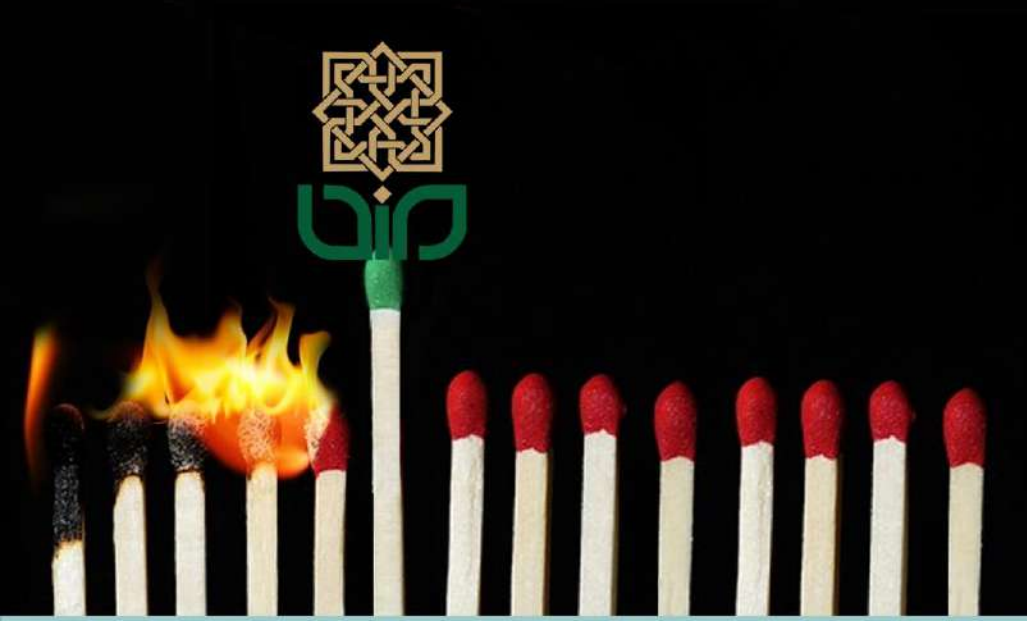
# MENEMUKAN NOVELTY PENELITIAN

NIRA NURWULANDARI



# Cara Menemukan Novelty Penelitian

- Literature Review
- Open Knowledge Map
- Analisis Bibliometric Vosviewer

# Literature Review

**Teknik Literatur Review**

1. Mencari Kesamaan (Compare);

   teknik melakukan review dengan cara mencari kesamaan diantara beberapa literatur & diambil kesimpulannya.

2. Mencari Ketidaksamaan (Contrast);

   teknik melakukan review dengan cara menemukan perbedaan diantara beberapa literatur & diambil kesimpulannya.

3. Memberikan Pandangan (Criticize);

   teknik melakukan review dengan membuat pendapat sendiri terhadap sumber yang dibaca.

4. Membandingkan (Synthesize);

   teknik melkukan review dengan menggabungkan beberapa sumber menjadi sebuah ide baru.

5. Meringkas (Summarize);

   teknik melakukan review dengan menulis kembali sumbernya dengan kalimat sendiri.

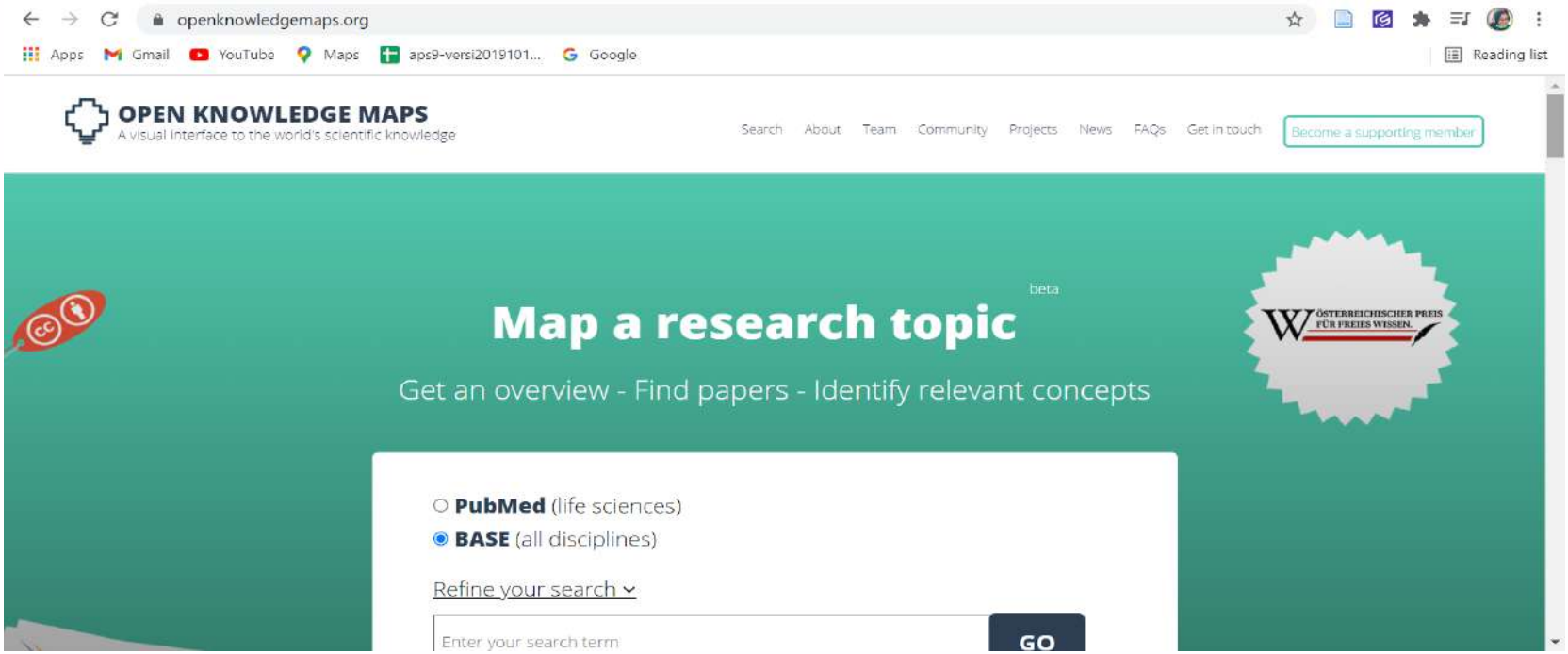
# Hasil Penelusuran Pustaka dari Jurnal

| Nama Penulis Jurnal & Tahun | Variabel | Teori | Metode Penelitian | Hasil Penelitian, Kesimpulan, dan Saran | Persamaan & Perbedaan variabel, metode, konsep yang digunakan penulis dengan peneliti sebelumnya |
|---|---|---|---|---|---|
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

# Open Knowledge Map

- Buka halaman:

https://openknowledgemaps.org/

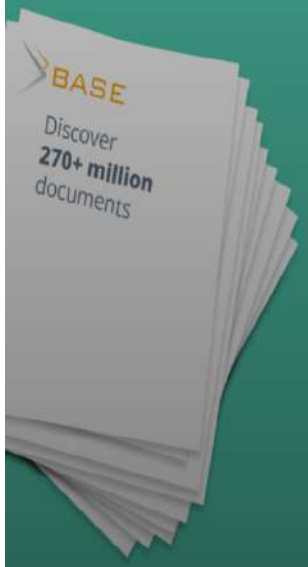


openknowledgemaps.org

Apps Gmail YouTube Maps aps9-versi2019101... Google Reading list

**OPEN KNOWLEDGE MAPS**
A visual interface to the world's scientific knowledge

Search About Team Community Projects News FAQs Get in touch Become a supporting member




○ **PubMed** (life sciences)
◉ **BASE** (all disciplines)

Refine your search

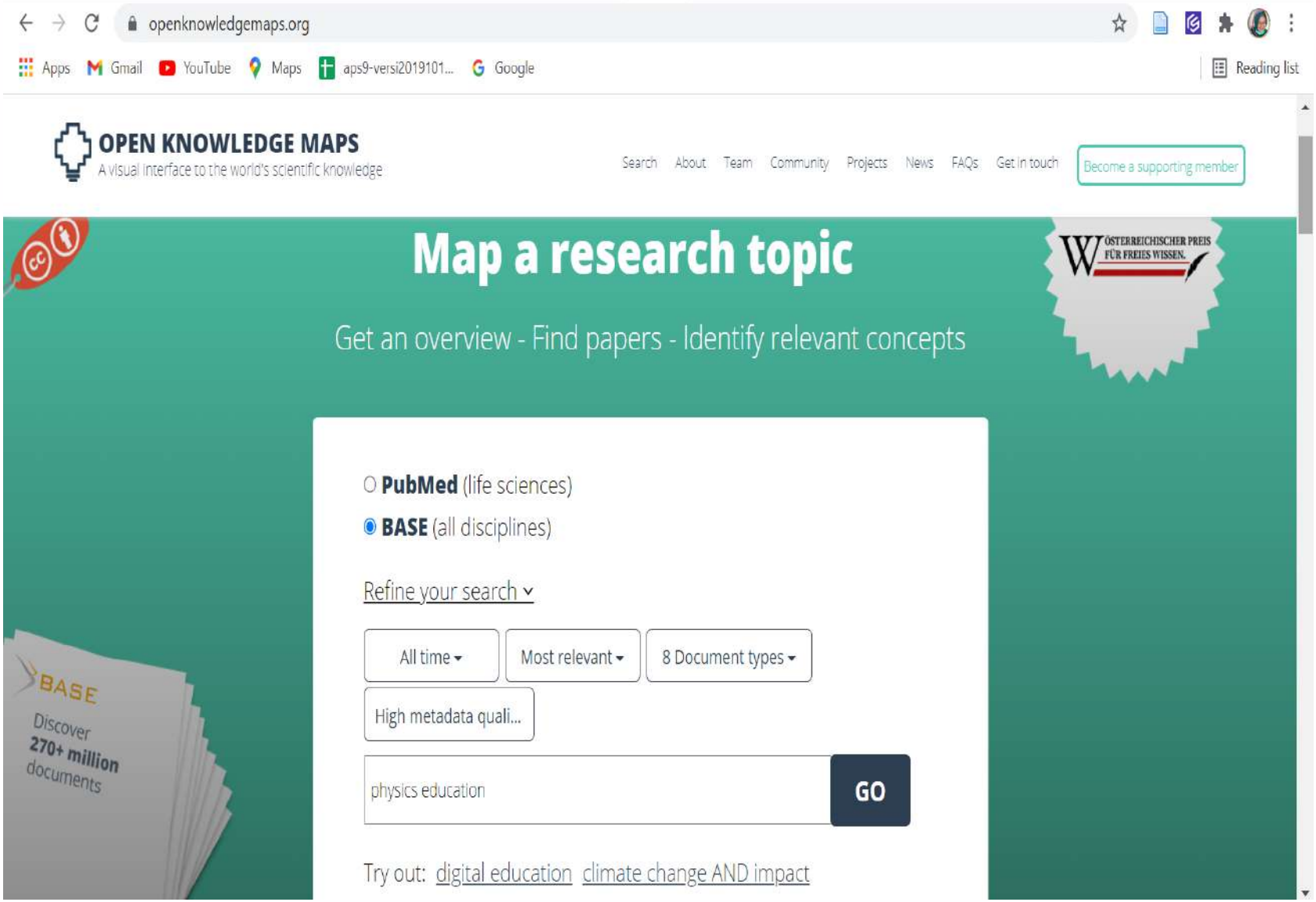
Custom range | Most relevant | 8 Document types | High metadata quali...

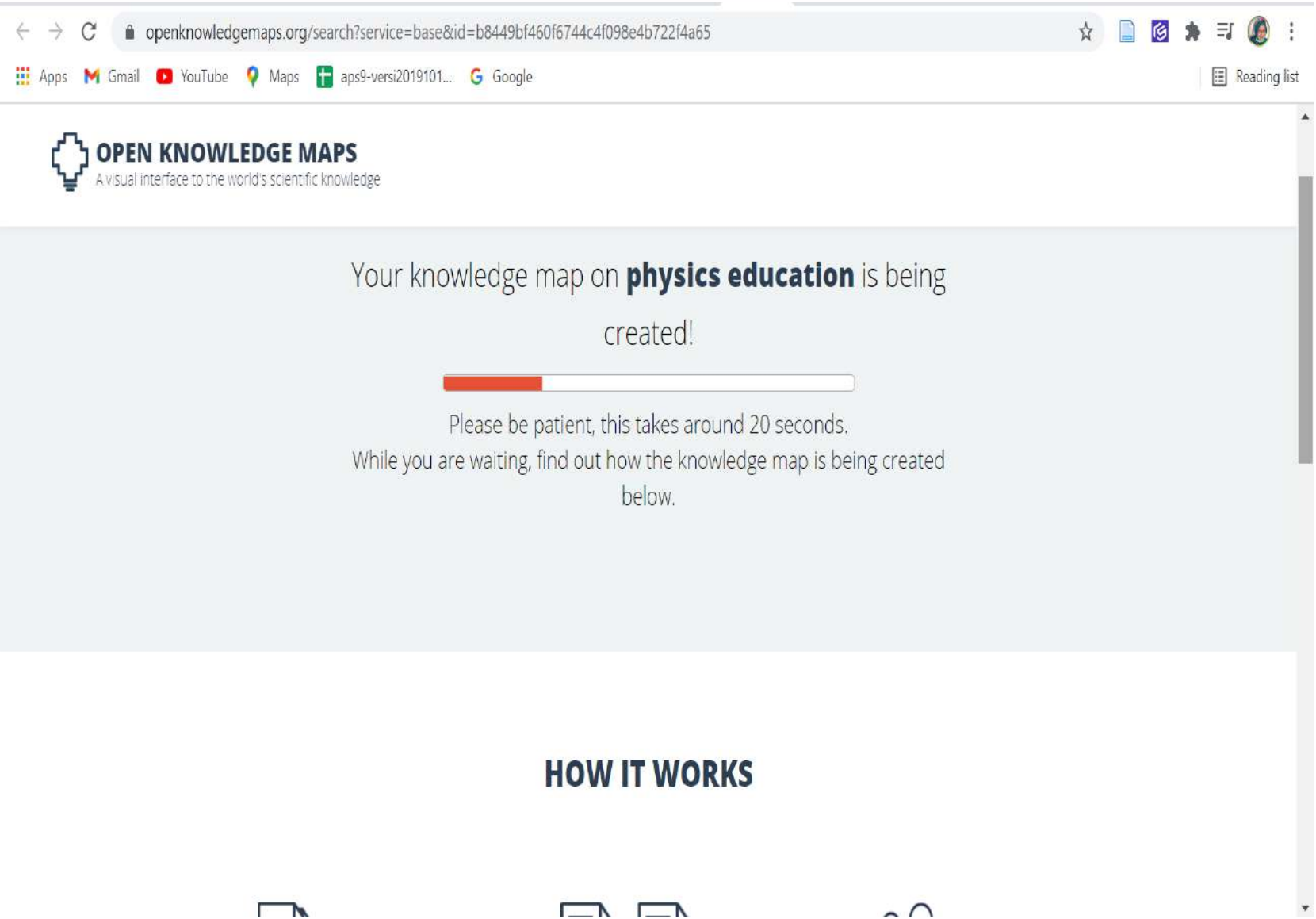
**From:** 2016-01-01 **To:** 2021-06-24

physics education **GO**

Try out: digital education climate change AND impact

What is Open Knowledge Maps?


openknowledgemaps.org
Apps
Gmail
YouTube
Maps
aps9-versi2019101...
Google
Reading list
OPEN KNOWLEDGE MAPS
A visual interface to the world's scientific knowledge
Search
About
Team
Community
Projects
News
FAQs
Get in touch
Become a supporting member
Map a research topic
Get an overview - Find papers - Identify relevant concepts
ÖSTERREICHISCHER PREIS FÜR FREIES WISSEN.
PubMed (life sciences)
BASE (all disciplines)
Refine your search
All time
Most relevant
8 Document types
High metadata quali...
physics education
GO
Try out: digital education climate change AND impact
BASE
Discover
270+ million
documents


openknowledgemaps.org/search?service=base&id=b8449bf460f6744c4f098e4b722f4a65
Apps
Gmail
YouTube
Maps
aps9-versi2019101...
Google
Reading list
OPEN KNOWLEDGE MAPS
A visual interface to the world's scientific knowledge
Your knowledge map on physics education is being created!
Please be patient, this takes around 20 seconds.
While you are waiting, find out how the knowledge map is being created below.
HOW IT WORKS

openknowledgemaps.org/map/5fa084ffe91f3a71fcd3d415916ddbc1

Apps Gmail YouTube Maps aps9-versi2019101... Google Reading list

# OPEN KNOWLEDGE MAPS

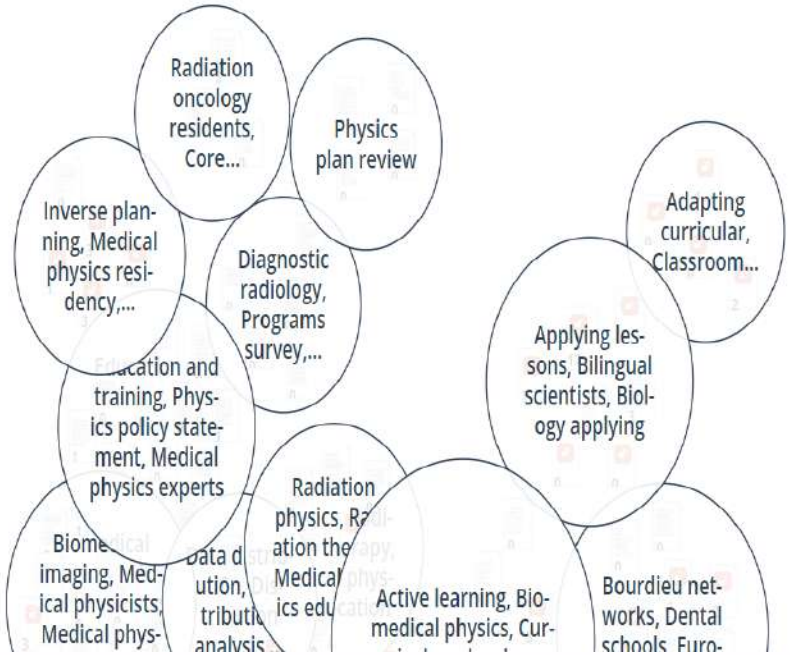
A visual interface to the world's scientific knowledge

Search About Team Community Projects News FAQs Get in touch Become a supporting member

Welcome to the **beta version** of Open Knowledge Maps. For more information on this map, please **click here**.

## Overview of **physics education**

100 most relevant documents (40 open access) Source: PubMed All time Document types




FAQs

Hide list (100 items)

Search within map... show: Any sort by: Title

[Effects of physics on development of optometry in the United States from the late 19th to the mid 20th century].

LINK

Dal-Young Kim in *Ui sahak* **(2014)**

[doi]: 10.13081/kjmh.2014.23.345

In this paper, it was studied how physics affected development of optometry in the United States, from aspects of formation and academization of optometry. It was also revealed that history of optometry was analogous to history of engineering. Optics...

**Area:** Bourdieu networks, Dental schools, European dental citations **0**

A generic curriculum development model for the bio-

LINK

openknowledgemaps.org/map/5fa084ffe91f3a71fcd3d415916ddbc1

Apps Gmail YouTube Maps aps9-versi2019101... Google Reading list

# OPEN KNOWLEDGE MAPS

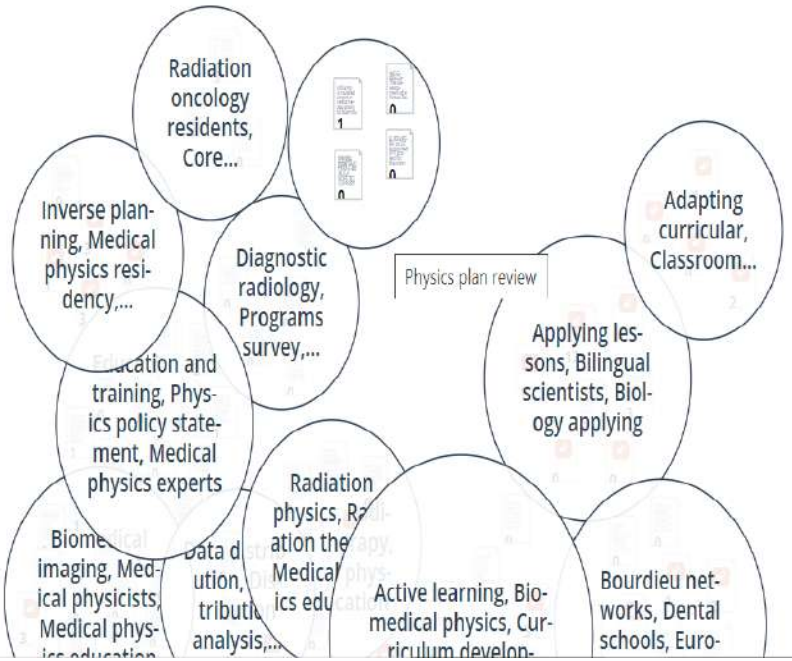
A visual interface to the world's scientific knowledge

Search About Team Community Projects News FAQs Get in touch Become a supporting member

Welcome to the **beta version** of Open Knowledge Maps. For more information on this map, please click here.

## Overview of physics education

100 most relevant documents (40 open access) Source: PubMed All time Document types




FAQs

Hide list (100 items)

Search within map... show: Any sort by: Title

[Effects of physics on development of optometry in the United States from the late 19th to the mid 20th century].

LINK

Dal-Young Kim in *Ui sahak* **(2014)**

[doi]: 10.13081/kjmh.2014.23.345

In this paper, it was studied how physics affected development of optometry in the United States, from aspects of formation and academization of optometry. It was also revealed that history of optometry was analogous to history of engineering. Optics...

**Area:** Bourdieu networks, Dental schools, European dental citations **0**

A generic curriculum development model for the bio-medical physics component of the educational and

LINK

openknowledgemaps.org/map/5fa084ffe91f3a71fcd3d415916ddbc1

Apps Gmail YouTube Maps aps9-versi2019101... Google Reading list

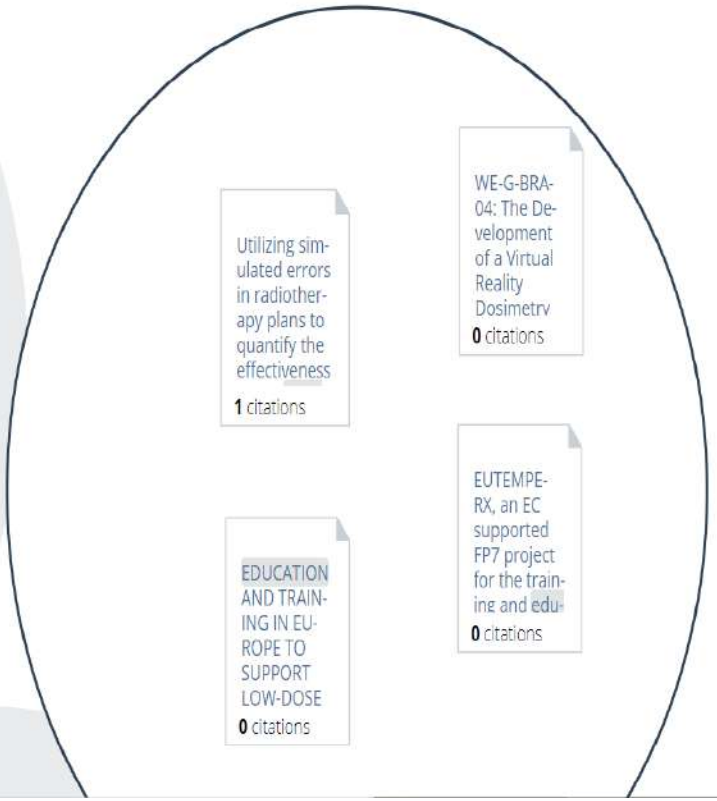
**OPEN KNOWLEDGE MAPS**
A visual interface to the world's scientific knowledge

Search About Team Community Projects News FAQs Get in touch Become a supporting member

← Back to overview

Search within map... show: Any sort by: Title

FAQs




**EDUCATION AND TRAINING IN EUROPE TO SUPPORT LOW-DOSE RADIATION PHYSICS AND RADIOBIOLOGY.** LINK

Andrea Ottolenghi, Klaus Trott, Giorgio Baiocco, Vere Smyth in *Radiation protection dosimetry* **(2019)**

[doi]: 10.1093/rpd/ncy232

The success of any research programme is dependent on a continuing influx of new expertise, and continuing education to ensure the newest technologies and methods are exploited. In the past decade, a strategic approach has been used to build up the r...

**Area:** Physics plan review citations **0**

**EUTEMPE-RX, an EC supported FP7 project for the training and education of medical physics experts in radiology.** LINK

H Bosmans, K Bliznakova, R Padovani, S Christofides, N Van Peteghem, V Tsapaki, C J Caruana, J Vassileva in *Radiation protection dosimetry* **(2015)**

[doi]: 10.1093/rpd/ncv306

openknowledgemaps.org/map/5fa084ffe91f3a71fcd3d415916ddbc1

Apps Gmail YouTube Maps aps9-versi2019101... Google Reading list

**OPEN KNOWLEDGE MAPS**
A visual interface to the world's scientific knowledge

Search About Team Community Projects News FAQs Get in touch Become a supporting member

← Back to overview

Search within map... show: Any sort by: Title

FAQs

Utilizing simulated errors in radiotherapy plans to quantify the effectiveness of the physics plan review.

Olga Gopan, Wade P Smith, Alexei Chvetsov, Kristi Hendrickson, Alan Kalet, Minsun Kim, Matthew Nyflot, Mark Phillips, Lori Young, Avrey Novak, Jing Zeng, Eric Ford

in *Medical physics* **(2018)**

**1** citations

LINK

## Utilizing simulated errors in radiotherapy plans to quantify the effectiveness of the physics plan review.

Olga Gopan, Wade P Smith, Alexei Chvetsov, Kristi Hendrickson, Alan Kalet, Minsun Kim, Matthew Nyflot, Mark Phillips, Lori Young, Avrey Novak, Jing Zeng, Eric Ford in *Medical physics* **(2018)**

[doi]: 10.1002/mp.13242

The review of a radiation therapy plan by a physicist prior to treatment is a standard tool for ensuring the quality of treatments. However, little is known about how well this task is performed in practice. The goal of this study is to present a novel method to measure the effectiveness of physics plan review by introducing simulated errors into computerized "mock" treatment charts and measuring the performance of plan review by physicists.We generated six simulated treatment charts containing multiple errors. To select errors, we compiled a list based on events from a departmental incident learning system and an international incident learning system (SAFRON). Seventeen errors with the highest scores for frequency and severity were included in the simulations included six mock treatment charts. Eight physicists reviewed the simulated charts as they would a normal pretreatment plan review, with each chart being reviewed by at least six physicists. There were 113 data points for evaluation. Observer bias was minim-

pubmed.ncbi.nlm.nih.gov/30535246/

Apps Gmail YouTube Maps aps9-versi2019101... Google Reading list

National Library of Medicine
National Center for Biotechnology Information

Log in

PubMed.gov

Search PubMed

Search

Advanced User Guide

Save Email Send to Display options

Radiat Prot Dosimetry. 2019 May 1;183(1-2):156-159. doi: 10.1093/rpd/ncy232.

# EDUCATION AND TRAINING IN EUROPE TO SUPPORT LOW-DOSE RADIATION PHYSICS AND RADIOBIOLOGY

Andrea Ottolenghi [1], Klaus Trott [1 2], Giorgio Baiocco [1], Vere Smyth [1]

Affiliations + expand

PMID: 30535246 DOI: 10.1093/rpd/ncy232

FULL TEXT LINKS

OXFORD ACADEMIC

ACTIONS

Cite

Favorites

SHARE

pubmed.ncbi.nlm.nih.gov/30535246/

Apps Gmail YouTube Maps aps9-versi2019101... Google Reading list



resources

## Similar articles

Education and training to support radiation protection research in Europe: the DoReMi experience.

Ottolenghi A, Trott KR, Smyth V.

Int J Radiat Biol. 2019 Jan;95(1):90-96. doi: 10.1080/09553002.2018.1454616. Epub 2018 Apr 3.

PMID: 29560780 Review.

European low-dose radiation risk research strategy: future of research on biological effects at low doses.

Salomaa S, Averbeck D, Ottolenghi A, Sabatier L, Bouffler S, Atkinson M, Jourdain JR.

Radiat Prot Dosimetry. 2015 Apr;164(1-2):38-41. doi: 10.1093/rpd/ncu350. Epub 2014 Dec 16.

PMID: 25520379

The European initiative on low-dose risk research: from the HLEG to MELODI.

Belli M, Tabocchini MA, Jourdain JR, Salomaa S, Repussard J.

Radiat Prot Dosimetry. 2015 Sep;166(1-4):178-81. doi: 10.1093/rpd/ncv136. Epub 2015 Apr 9.

PMID: 25862536

Multidisciplinary European low dose initiative: an update of the MELODI program.

Salomaa S, Jourdain JR, Kreuzer M, Jung T, Repussard J.

Int J Radiat Biol. 2017 Oct;93(10):1035-1039. doi: 10.1080/09553002.2017.1281463. Epub 2017 Feb 8.

1

2

Radiation Protection Dosimetry (2019), Vol. 183, No. 1–2, pp. 156–159
Advance Access publication 11 December 2018
doi:10.1093/rpd/ncy232

# EDUCATION AND TRAINING IN EUROPE TO SUPPORT LOW-DOSE RADIATION PHYSICS AND RADIOBIOLOGY

Andrea Ottolenghi[1,*], Klaus Trott[1,2], Giorgio Baiocco[1] and Vere Smyth[1]
[1]Physics Department, University of Pavia, I-27100 Pavia, Italy
[2]Oncology Department, University College London, WC1E 6AG, UK

*Corresponding author: andrea.ottolenghi@unipv.it

**The success of any research programme is dependent on a continuing influx of new expertise, and continuing education to ensure the newest technologies and methods are exploited. In the past decade, a strategic approach has been used to build up the research expertise in the area of radiation protection and risk estimation. The High Level Expert Group (HLEG, www.hleg.de) in their 2009 report on European low-dose research asserted that education and training were key components in the development and maintenance of expertise for research into the risks from low-levels of ionising radiation. Following their recommendations, a Euratom-funded Network of Excellence (DoReMi, www.doremi-noe.net) was setup to develop a platform of European research institutions to coordinate the research programme and develop expertise in the area. We present here the activities initiated by DoReMi and currently continued by CONCERT (www.concert-h2020.eu) in support of education and training in the scientific areas underpinning radiation protection research.**

## BACKGROUND

The successful continuation and fruitfulness of any scientific research area is dependent on a continuing influx of new expertise, and continuing education and training to ensure the newest technologies and methods are exploited. Much of today's research is carried on in the university environment, through departmental areas of interest, or sometimes individual professors, drawing in students to take up project or thesis work at the cutting edge of the topic. The university departments are often

### History: the European masters in Radiobiology

In 1992, the European Commission (EC) called for a course to be setup to provide a new group of experts in radiobiology to supplement the European capability in radiation protection research.

The course that was supported was the European Master of Science in Radiation Biology.[1] It ran from 1992 to 2012. The degree of MSc was awarded by member Colleges of London University (St Bartholomew's Medical College, London Medical College, University

openknowledgemaps.org/map/530133cf1768e6606f63c641a1a96768

Apps Gmail YouTube Maps aps9-versi2019101... Google Reading list

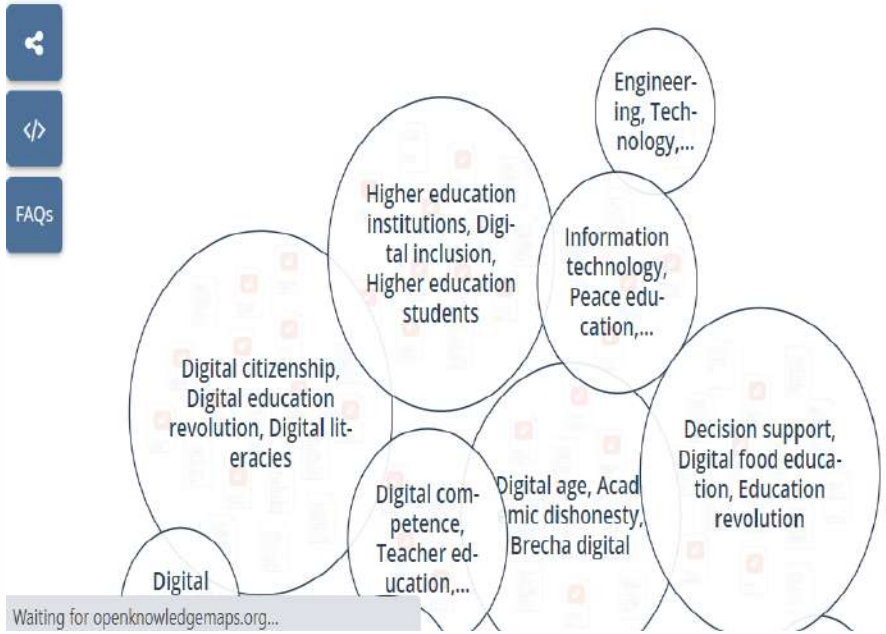
**OPEN KNOWLEDGE MAPS**
A visual interface to the world's scientific knowledge

Search About Team Community Projects News FAQs Get in touch Become a supporting member

Welcome to the **beta version** of Open Knowledge Maps. For more information on this map, please **click here**.

## Overview of **digital education**

100 most relevant documents (44 open access) Source: BASE Until 9 Jul 2020 Document types




FAQs

Hide list (100 items)

Search within map... show: Any sort by: Relevance

open access

**Digital Education And Learning: The Growing Trend In Academic And Business Spaces—An International Overview**

PDF

P. K. Paul, P. S. Aithal **(2018)**

[link]: https://doi.org/10.5281/zenodo.1292855

Abstract ; The world becomes Digital day by day and thus activities, features and sectors and different spaces are highly associated with Digital Tools, Techniques and Technologies. Education domain becomes highly technology enabled in recent past an...

**Area:** Digital citizenship, Digital education revolution, Digital litera...

Paradox, promise and public pedagogy: implications of

Waiting for openknowledgemaps.org...

openknowledgemaps.org/map/530133cf1768e6606f63c641a1a96768

Apps Gmail YouTube Maps aps9-versi2019101... Google Reading list

OPEN KN
A visual interface

Welcome to the beta

Overview of dig
100 most relevant docume

become a supporting member

sort by: Relevance

FAQs

Digita
Digita
revolut

Digital
cameras,

g Trend In
itional

and thus activ-
re highly asso-
logies. Educa-
in recent past

Digital literaci...

1 of 8 Automatic Zoom

International Journal on Recent Researches in Science, Engineering & Technology (IJRRSET)

A Journal Established in early 2000 as National journal and upgraded to International journal in 2013 and is in existence for the last 10 years. It is run by Retired Professors from NIT, Trichy. Journal Indexed in JIR, DIIF and SJIF.

Research Paper

Available online at: www.jrrset.com

ISSN (Print) : 2347-6729
ISSN (Online) : 2348-3105

Volume 6, Issue 5,
May 2018.
JIR IF : 2.54
SJIF IF : 4.334
Cosmos: 5.395

Received on: 03.05.2018 Published on: 15.05.2018 Pages : 11-18

# Digital Education and Learning: The Growing Trend in Academic and Business Spaces—An International Overview

P. K. Paul[1], A. Bhuimali[2], Kalishankar Tiwary[3], P. S. Aithal[4], R. Rajesh[5]

[1]Raiganj University (RGU), West Bengal, India
[2]Vice Chancellor, Raiganj University, West Bengal, India
[2]HoD, Mathematics & Director-IQAC, Raiganj University, West Bengal, India
[4]Vice Chancellor, Srinivas University, Karnataka, India

# Analisis Bibliometric Vosviewer

**Link untuk mengunduh aplikasi**

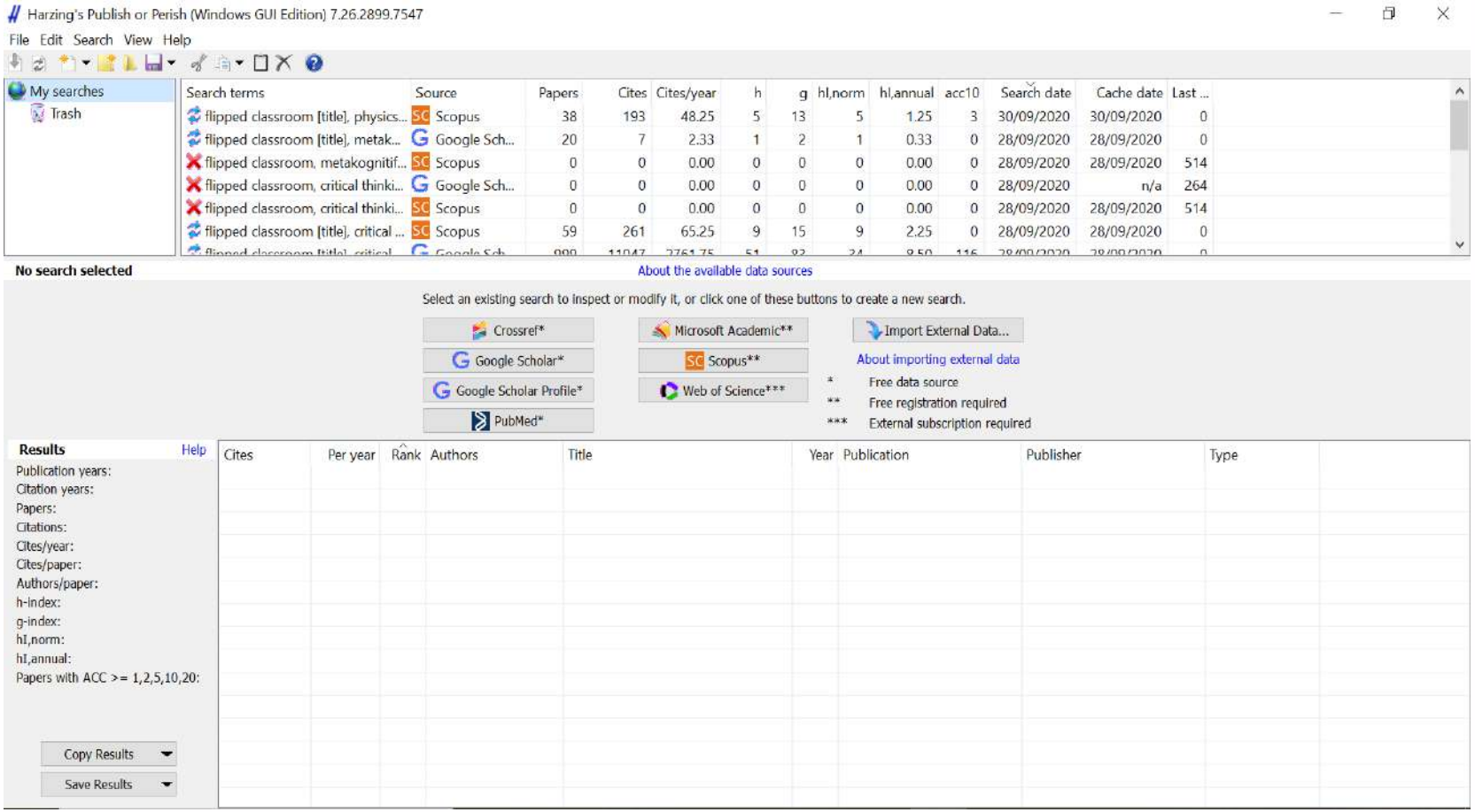
- Publish or Perish
  https://harzing.com/resources/publish-or-perish/windows
- Mendeley

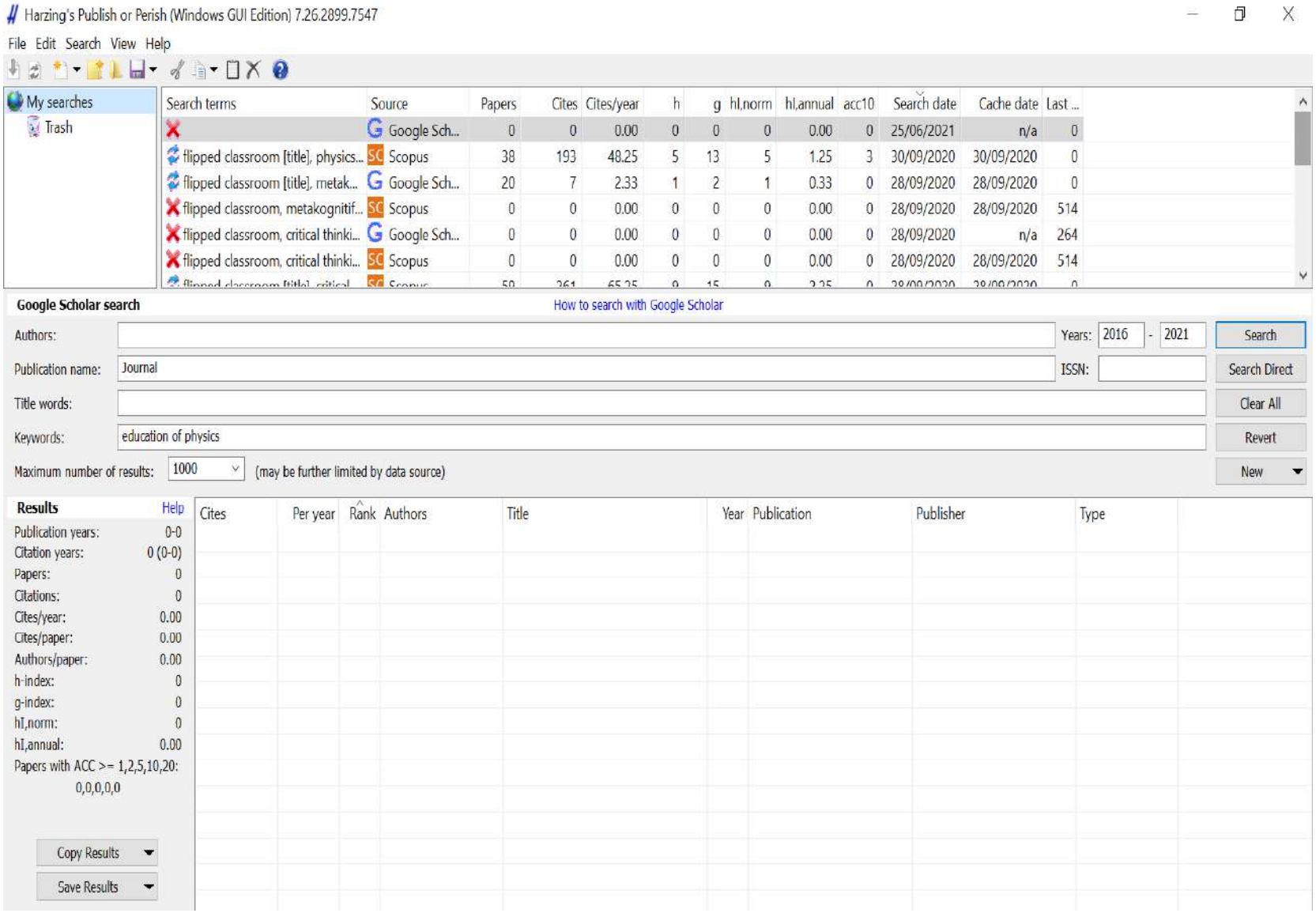
  https://www.mendeley.com/download-desktop-new/windows#download
- VOSviewer:

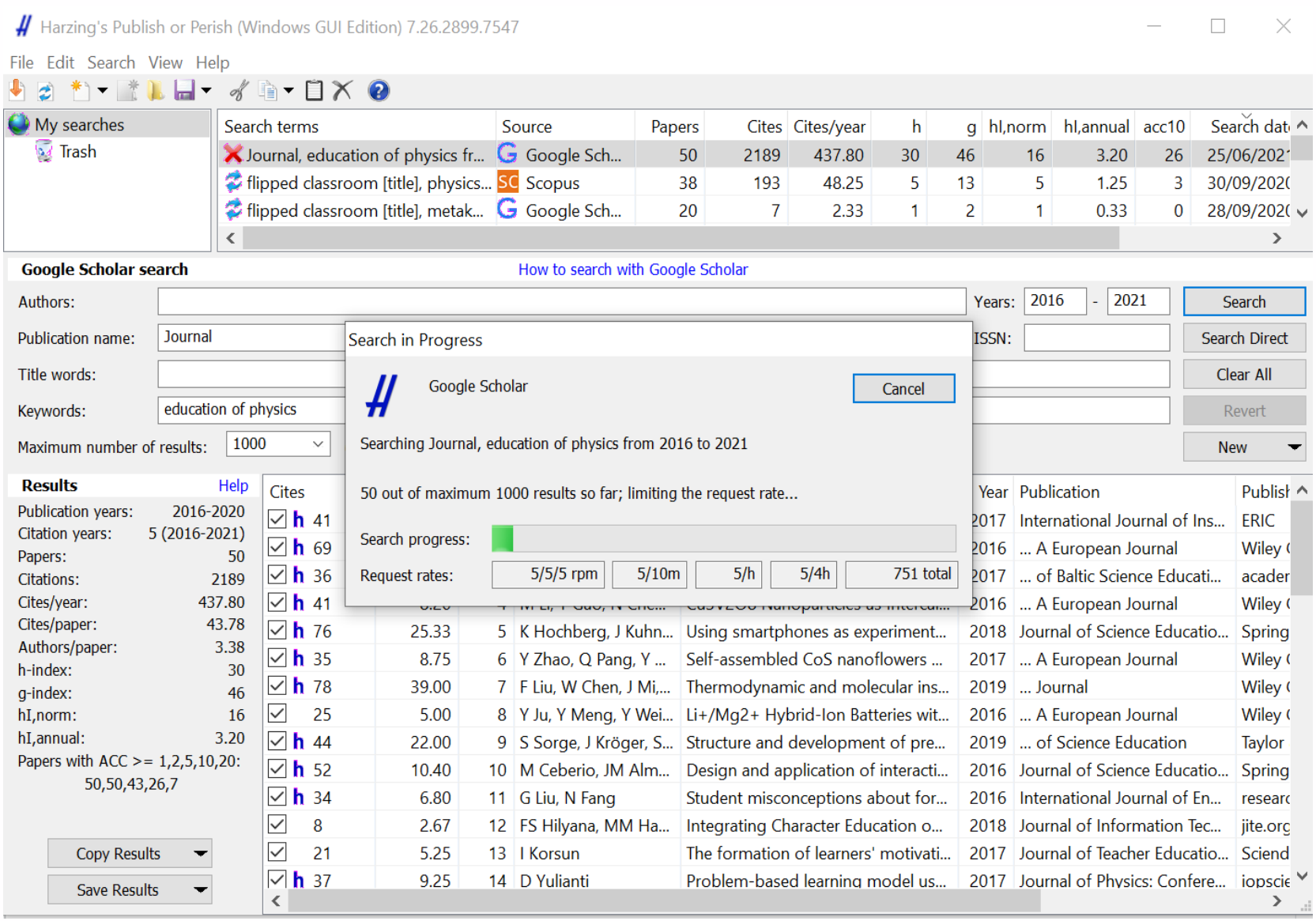
  https://www.vosviewer.com/download
- Petunjuk pemakaian Vosviwer
  https://www.vosviewer.com/getting-sta...

- VOSviewer mendukung tiga jenis file manajer referensi : file RIS, file EndNote, dan file RefWorks
- Ketiga jenis file tsb bisa didownload dulu dg Publish or Perish
- **atau** langsung dari scopus (nanti disimpan dulu dalam bentuk RIS, EndNote, dan RefWorks)
- **atau** dari mendeley untuk menganalisis mana yg akan dipakai atau dipetakan (memetakannya dg menggunakan VOSviewer)

# 1. Publish or Perish




Harzing's Publish or Perish (Windows GUI Edition) 7.26.2899.7547
File Edit Search View Help
My searches
Trash
Search terms | Source | Papers | Cites | Cites/year | h | g | hI,norm | hI,annual | acc10 | Search date | Cache date | Last ...
Google Sch... 0 0 0.00 0 0 0 0.00 0 25/06/2021 n/a 0
flipped classroom [title], physics... Scopus 38 193 48.25 5 13 5 1.25 3 30/09/2020 30/09/2020 0
flipped classroom [title], metak... Google Sch... 20 7 2.33 1 2 1 0.33 0 28/09/2020 28/09/2020 0
flipped classroom, metakognitif... Scopus 0 0 0.00 0 0 0 0.00 0 28/09/2020 28/09/2020 514
flipped classroom, critical thinki... Google Sch... 0 0 0.00 0 0 0 0.00 0 28/09/2020 n/a 264
flipped classroom, critical thinki... Scopus 0 0 0.00 0 0 0 0.00 0 28/09/2020 28/09/2020 514
Google Scholar search
How to search with Google Scholar
Authors:
Years: 2016 - 2021
Search
Publication name: Journal
ISSN:
Search Direct
Title words:
Clear All
Keywords: education of physics
Revert
Maximum number of results: 1000 (may be further limited by data source)
New
Results Help
Publication years: 0-0
Citation years: 0 (0-0)
Papers: 0
Citations: 0
Cites/year: 0.00
Cites/paper: 0.00
Authors/paper: 0.00
h-index: 0
g-index: 0
hI,norm: 0
hI,annual: 0.00
Papers with ACC >= 1,2,5,10,20: 0,0,0,0,0
Copy Results
Save Results
Cites | Per year | Rank | Authors | Title | Year | Publication | Publisher | Type



Harzing's Publish or Perish (Windows GUI Edition) 7.26.2899.7547

File Edit Search View Help

My searches
Trash

| Search terms | Source | Papers | Cites | Cites/year | h | g | hI,norm | hI,annual | acc10 | Search date | Cache date | Last ... |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Journal, education of physics fr... | Google Sch... | 200 | 19658 | 3931.60 | 60 | 137 | 37 | 7.40 | 111 | 25/06/2021 | 25/06/2021 | 0 |
| flipped classroom [title], physics... | Scopus | 38 | 193 | 48.25 | 5 | 13 | 5 | 1.25 | 3 | 30/09/2020 | 30/09/2020 | 0 |
| flipped classroom [title], metak... | Google Sch... | 20 | 7 | 2.33 | 1 | 2 | 1 | 0.33 | 0 | 28/09/2020 | 28/09/2020 | 0 |
| flipped classroom, metakognitif... | Scopus | 0 | 0 | 0.00 | 0 | 0 | 0 | 0.00 | 0 | 28/09/2020 | 28/09/2020 | 514 |
| flipped classroom, critical thinki... | Google Sch... | 0 | 0 | 0.00 | 0 | 0 | 0 | 0.00 | 0 | 28/09/2020 | n/a | 264 |
| flipped classroom, critical thinki... | Scopus | 0 | 0 | 0.00 | 0 | 0 | 0 | 0.00 | 0 | 28/09/2020 | 28/09/2020 | 514 |
| [illegible] | Scopus | 59 | 261 | 65.25 | 9 | 15 | 9 | 2.25 | 0 | 28/09/2020 | 28/09/2020 | 0 |

**Google Scholar search** How to search with Google Scholar

Authors: Years: 2016 - 2021 Search

Publication name: Journal ISSN: Search Direct

Title words: Clear All

Keywords: education of physics Revert

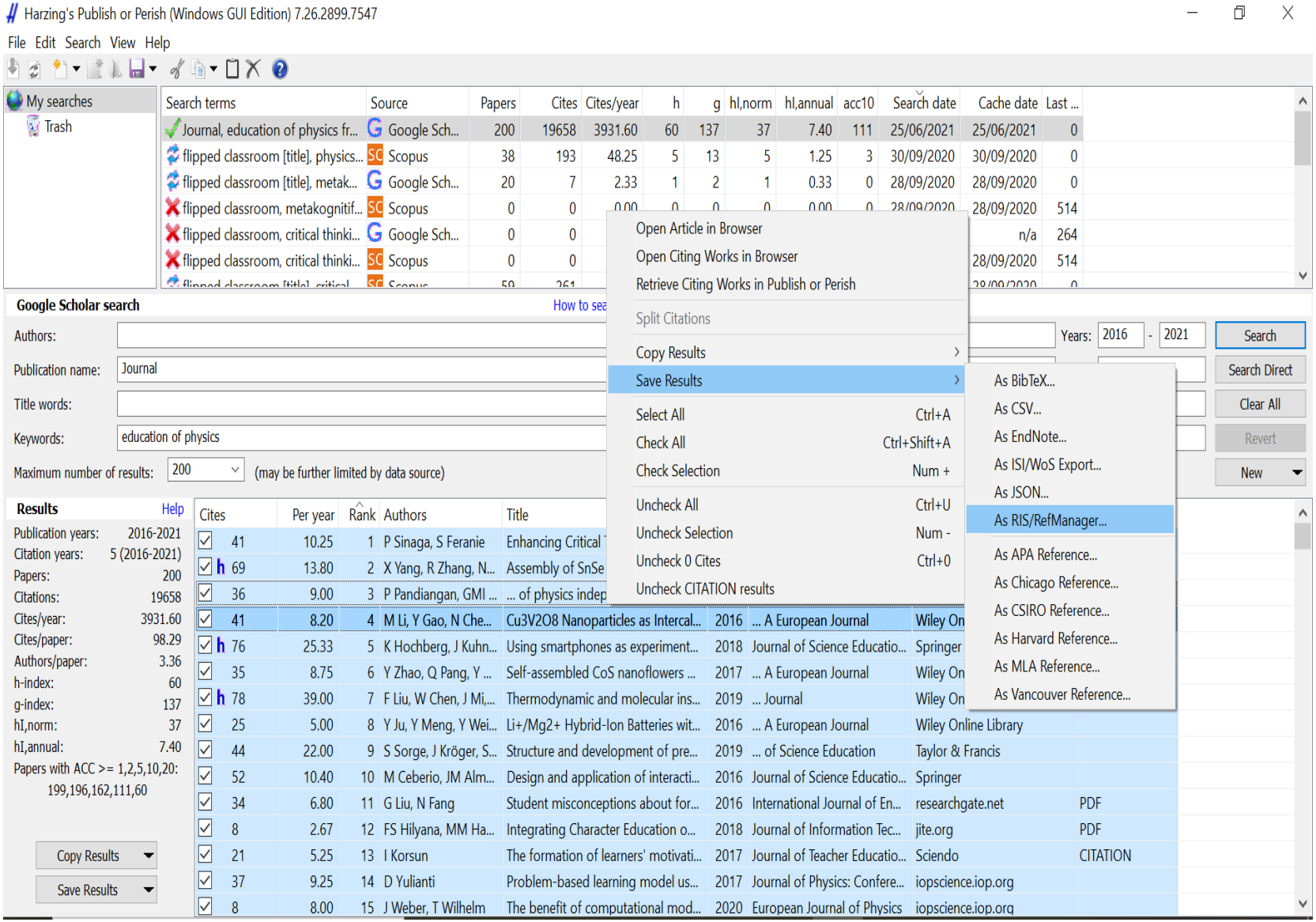
Maximum number of results: 200 (may be further limited by data source) New

**Results** Help

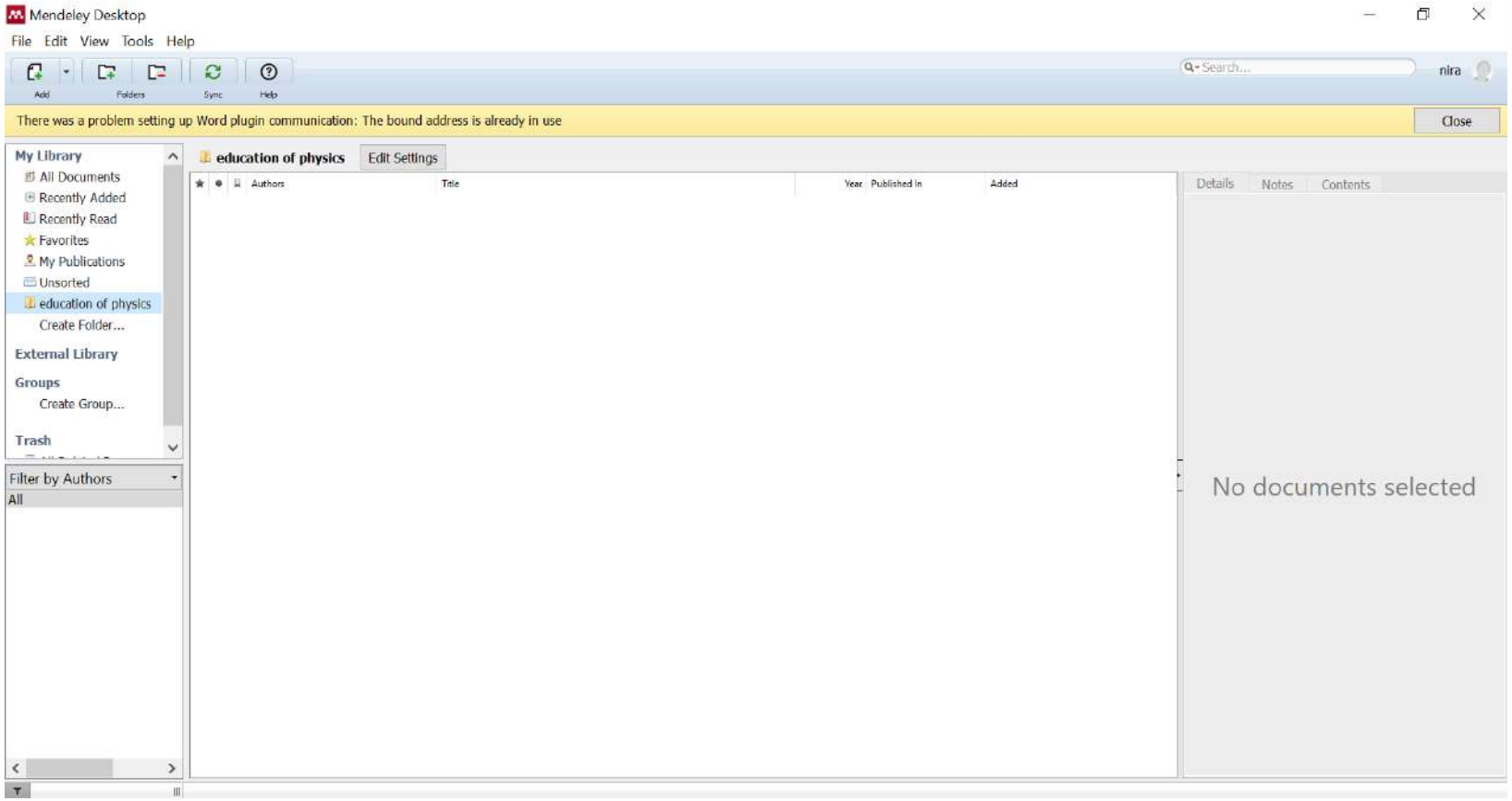
Publication years: 2016-2021
Citation years: 5 (2016-2021)
Papers: 200
Citations: 19658
Cites/year: 3931.60
Cites/paper: 98.29
Authors/paper: 3.36
h-index: 60
g-index: 137
hI,norm: 37
hI,annual: 7.40
Papers with ACC >= 1,2,5,10,20: 199,196,162,111,60

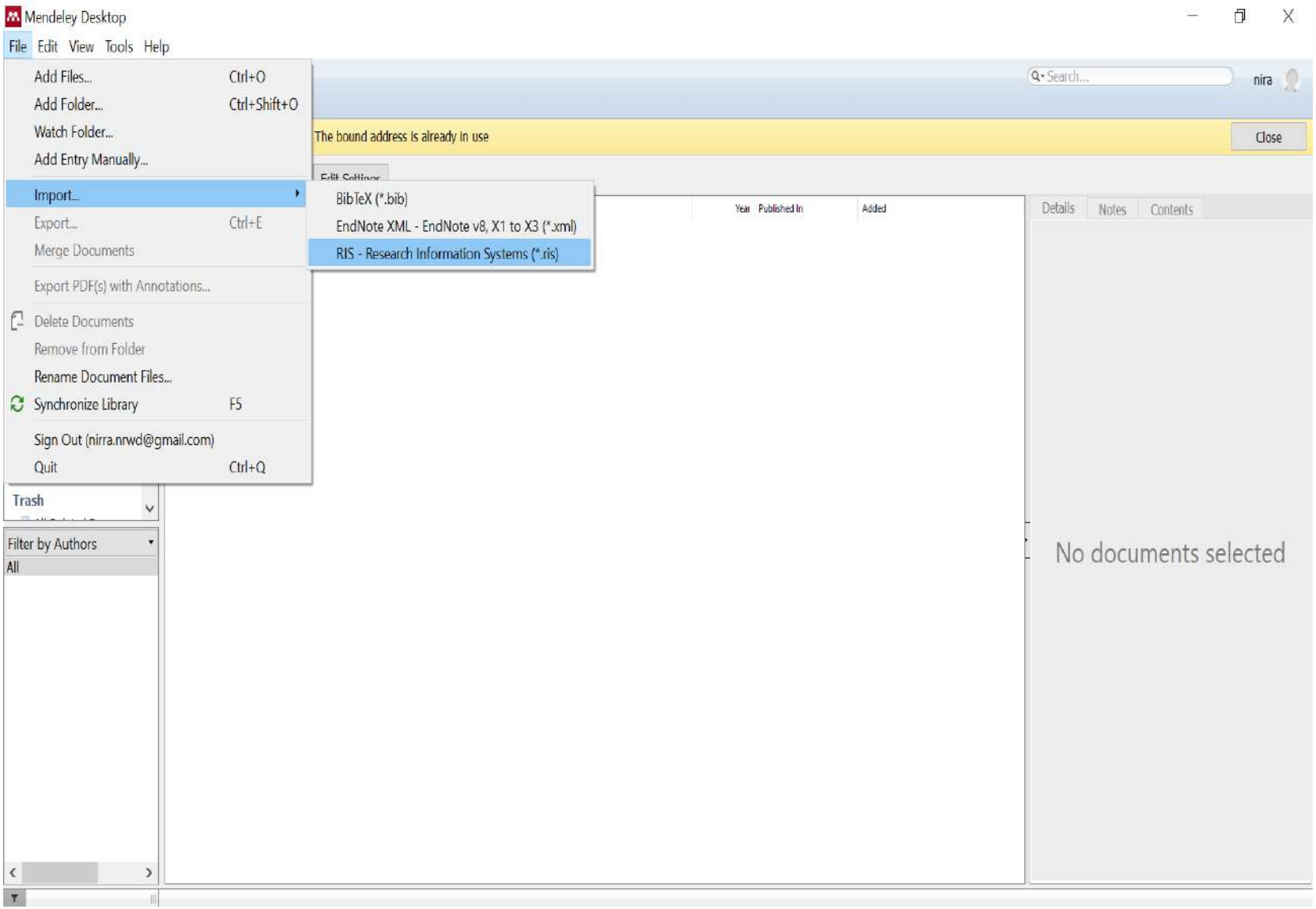
Copy Results
Save Results

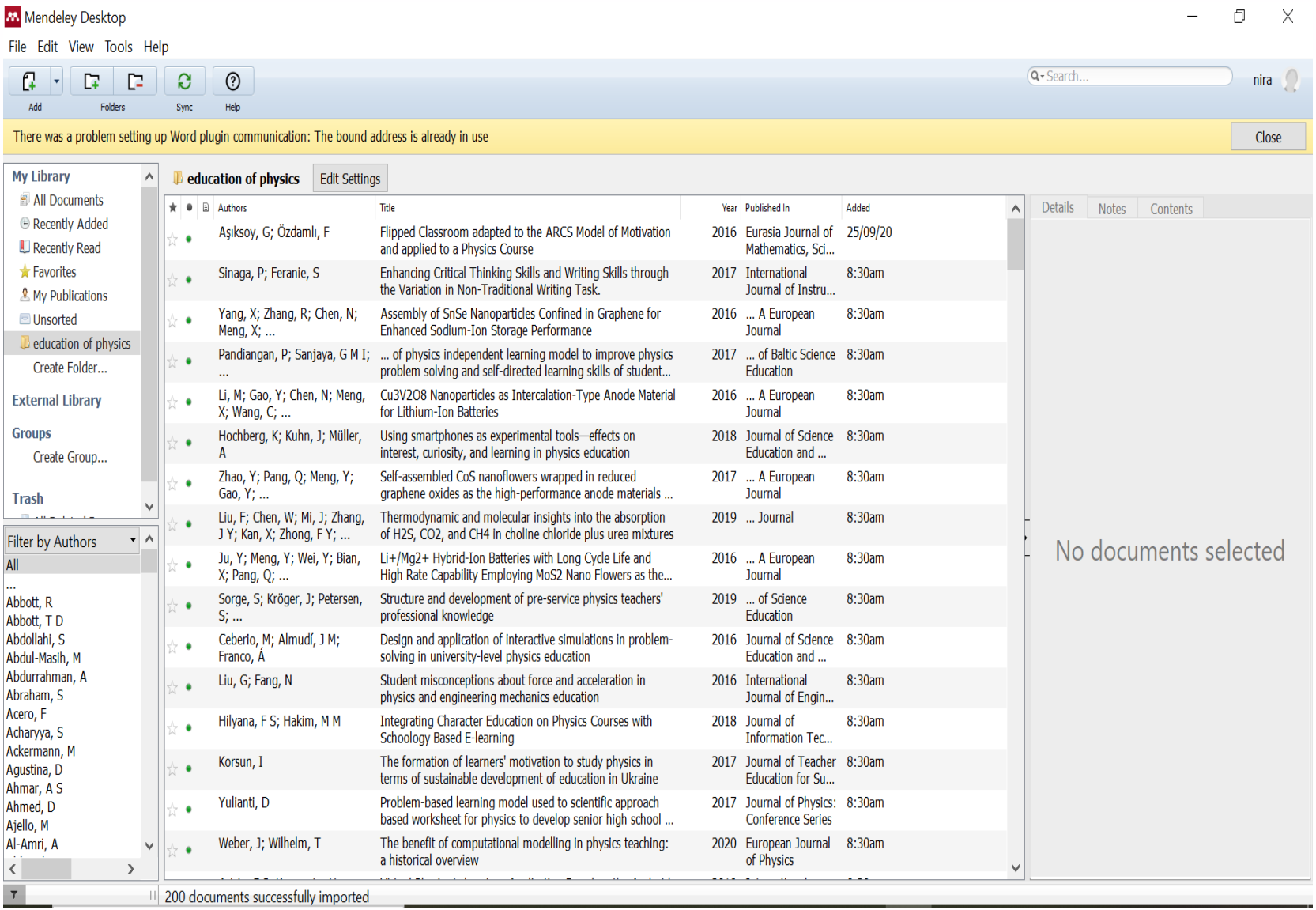
| Cites | Per year | Rank | Authors | Title | Year | Publication | Publisher | Type |
|---|---|---|---|---|---|---|---|---|
| 41 | 10.25 | 1 | P Sinaga, S Feranie | Enhancing Critical Thinking Skills a... | 2017 | International Journal of Ins... | ERIC | |
| h 69 | 13.80 | 2 | X Yang, R Zhang, N... | Assembly of SnSe Nanoparticles C... | 2016 | ... A European Journal | Wiley Online Library | |
| 36 | 9.00 | 3 | P Pandiangan, GMI ... | ... of physics independent learning... | 2017 | ... of Baltic Science Educati... | academia.edu | PDF |
| 41 | 8.20 | 4 | M Li, Y Gao, N Che... | Cu3V2O8 Nanoparticles as Intercal... | 2016 | ... A European Journal | Wiley Online Library | |
| h 76 | 25.33 | 5 | K Hochberg, J Kuhn... | Using smartphones as experiment... | 2018 | Journal of Science Educatio... | Springer | |
| 35 | 8.75 | 6 | Y Zhao, Q Pang, Y ... | Self-assembled CoS nanoflowers ... | 2017 | ... A European Journal | Wiley Online Library | |
| h 78 | 39.00 | 7 | F Liu, W Chen, J Mi,... | Thermodynamic and molecular ins... | 2019 | ... Journal | Wiley Online Library | |
| 25 | 5.00 | 8 | Y Ju, Y Meng, Y Wei... | Li+/Mg2+ Hybrid-Ion Batteries wit... | 2016 | ... A European Journal | Wiley Online Library | |
| 44 | 22.00 | 9 | S Sorge, J Kröger, S... | Structure and development of pre... | 2019 | ... of Science Education | Taylor & Francis | |
| 52 | 10.40 | 10 | M Ceberio, JM Alm... | Design and application of interacti... | 2016 | Journal of Science Educatio... | Springer | |
| 34 | 6.80 | 11 | G Liu, N Fang | Student misconceptions about for... | 2016 | International Journal of En... | researchgate.net | PDF |
| 8 | 2.67 | 12 | FS Hilyana, MM Ha... | Integrating Character Education o... | 2018 | Journal of Information Tec... | jite.org | PDF |
| 21 | 5.25 | 13 | I Korsun | The formation of learners' motivati... | 2017 | Journal of Teacher Educatio... | Sciendo | CITATION |
| 37 | 9.25 | 14 | D Yulianti | Problem-based learning model us... | 2017 | Journal of Physics: Confere... | iopscience.iop.org | |
| 8 | 8.00 | 15 | J Weber, T Wilhelm | The benefit of computational mod... | 2020 | European Journal of Physics | iopscience.iop.org | |



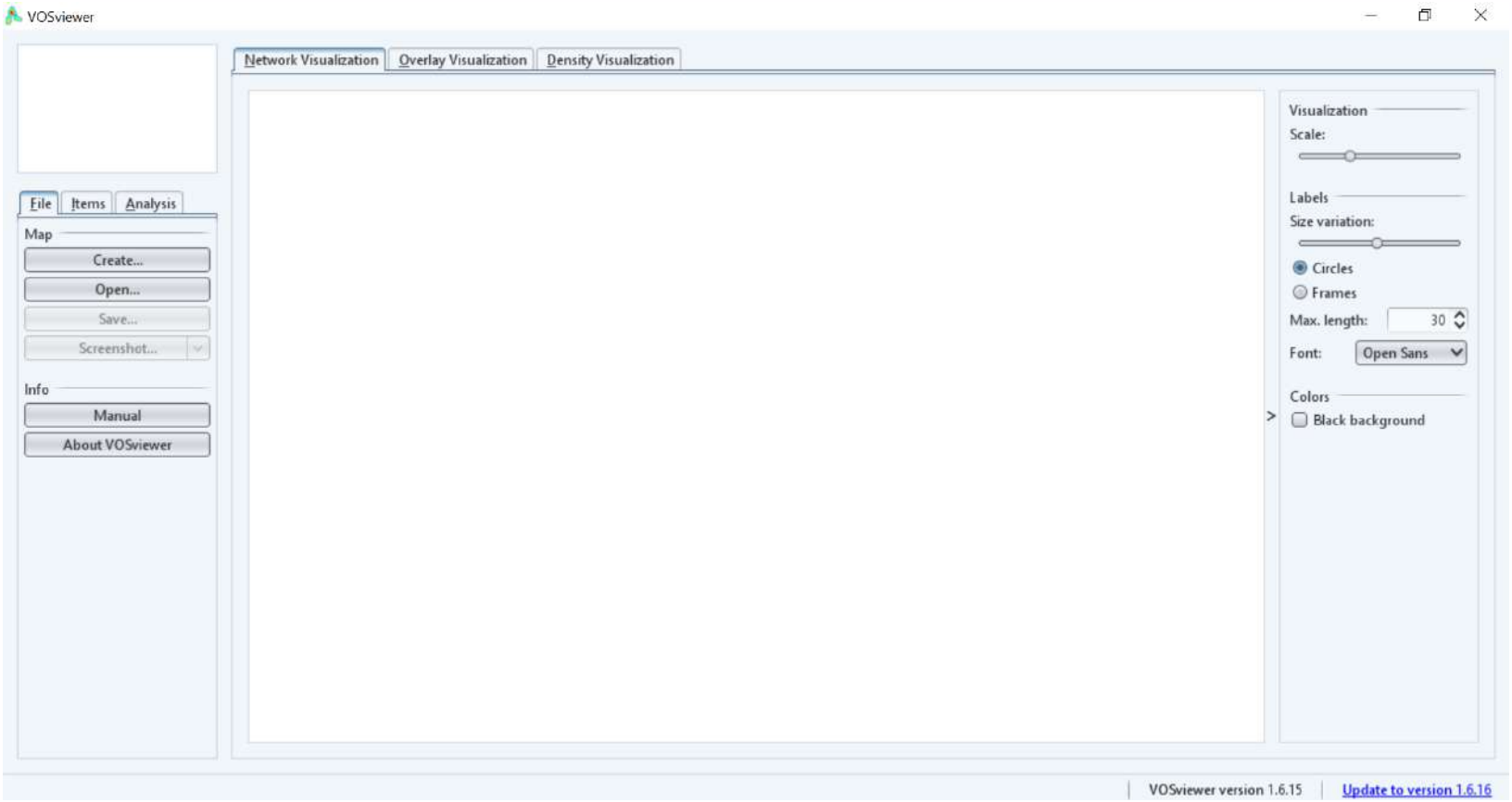
# 2. Mendeley

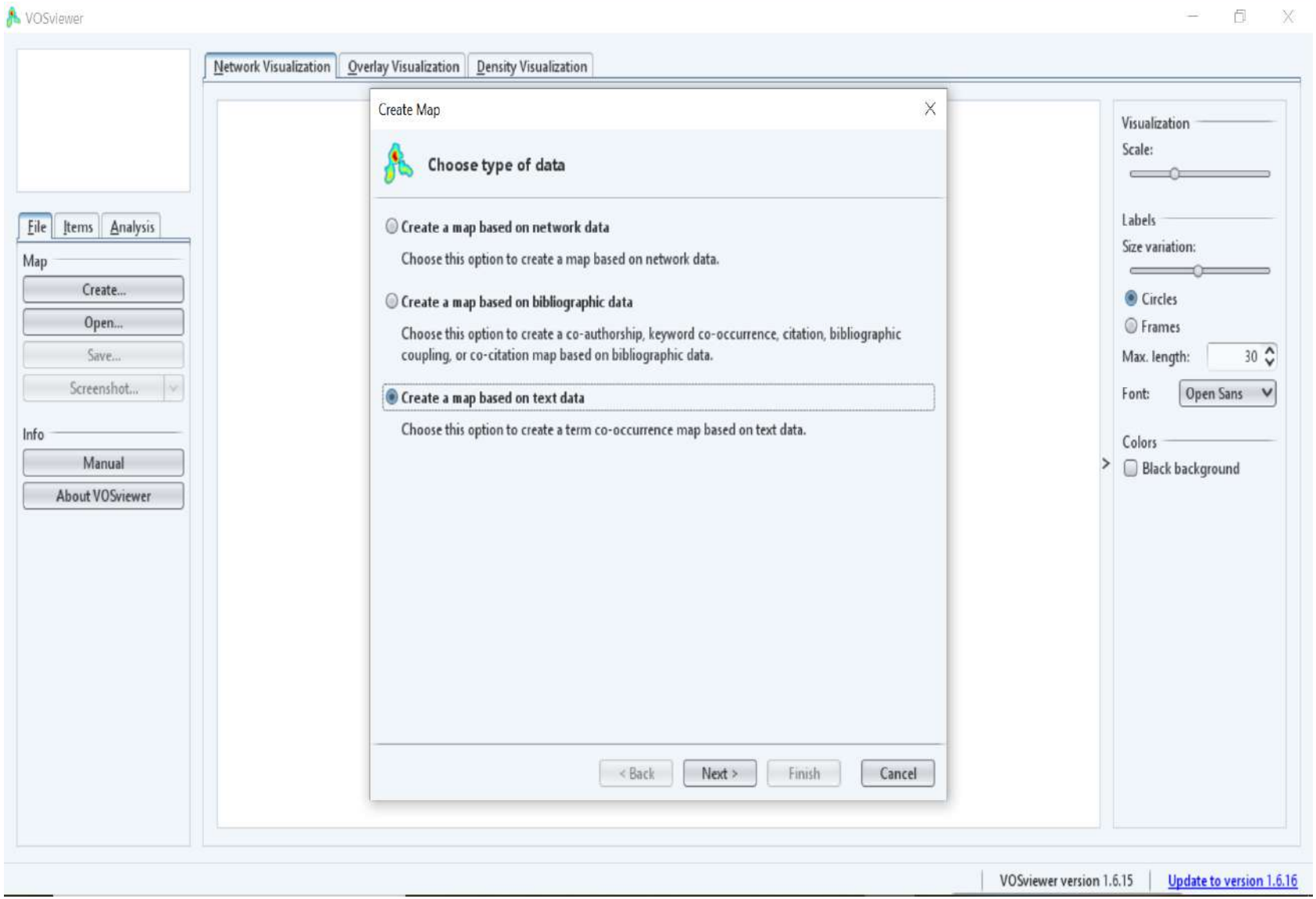

Mendeley Desktop
File Edit View Tools Help
Add
Folders
Sync
Help
Search...
nira
There was a problem setting up Word plugin communication: The bound address is already in use
Close
My Library
All Documents
Recently Added
Recently Read
Favorites
My Publications
Unsorted
education of physics
Create Folder...
External Library
Groups
Create Group...
Trash
Filter by Authors
All
education of physics
Edit Settings
Authors
Title
Year
Published In
Added
Details
Notes
Contents
No documents selected

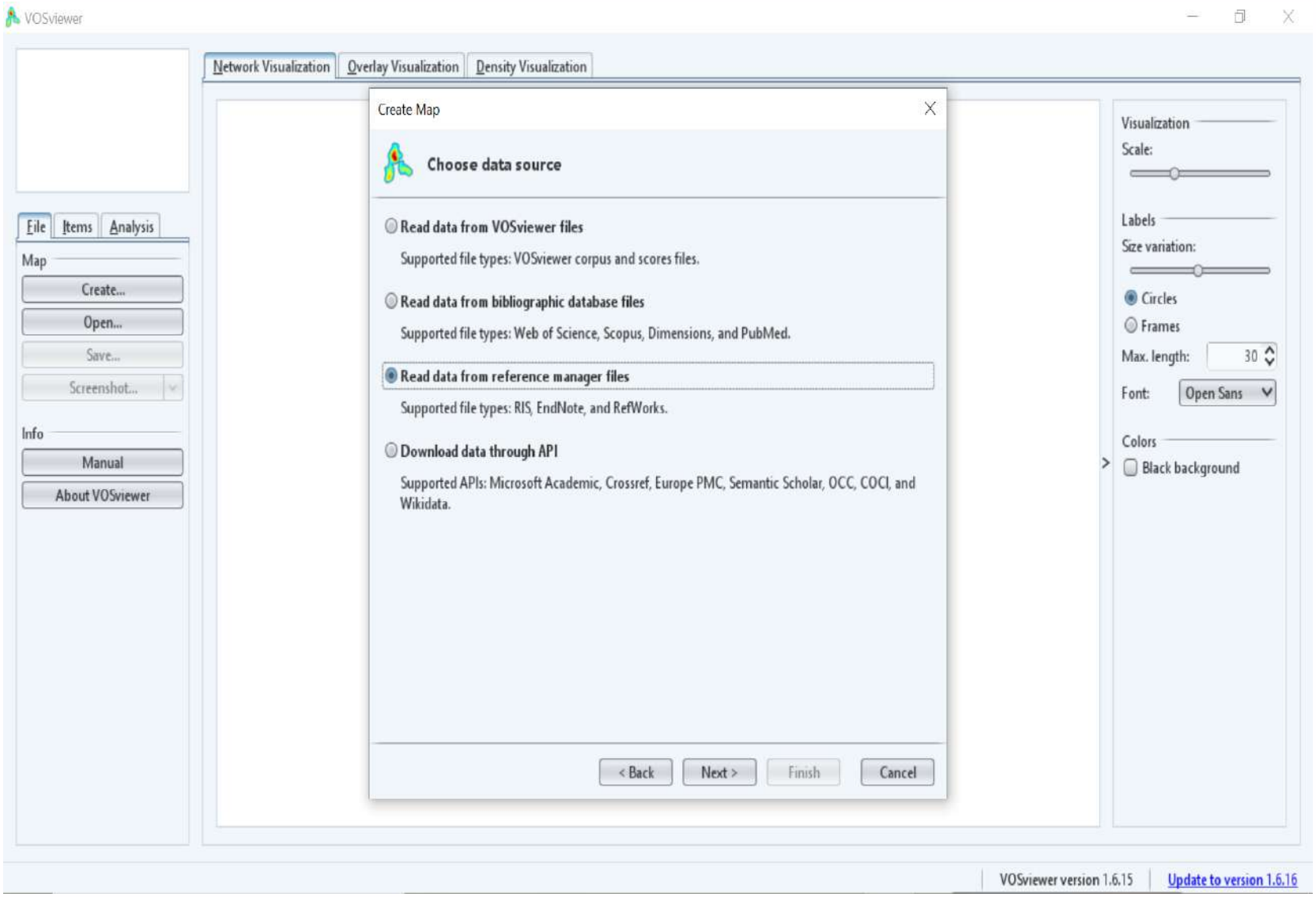

Mendeley Desktop
File Edit View Tools Help
Add Files... Ctrl+O
Add Folder... Ctrl+Shift+O
Watch Folder...
Add Entry Manually...
Import...
Export... Ctrl+E
Merge Documents
Export PDF(s) with Annotations...
Delete Documents
Remove from Folder
Rename Document Files...
Synchronize Library F5
Sign Out (nirra.nrwd@gmail.com)
Quit Ctrl+Q
BibTeX (*.bib)
EndNote XML - EndNote v8, X1 to X3 (*.xml)
RIS - Research Information Systems (*.ris)
Search...
nira
The bound address is already in use
Close
Year
Published In
Added
Details
Notes
Contents
Trash
Filter by Authors
All
No documents selected

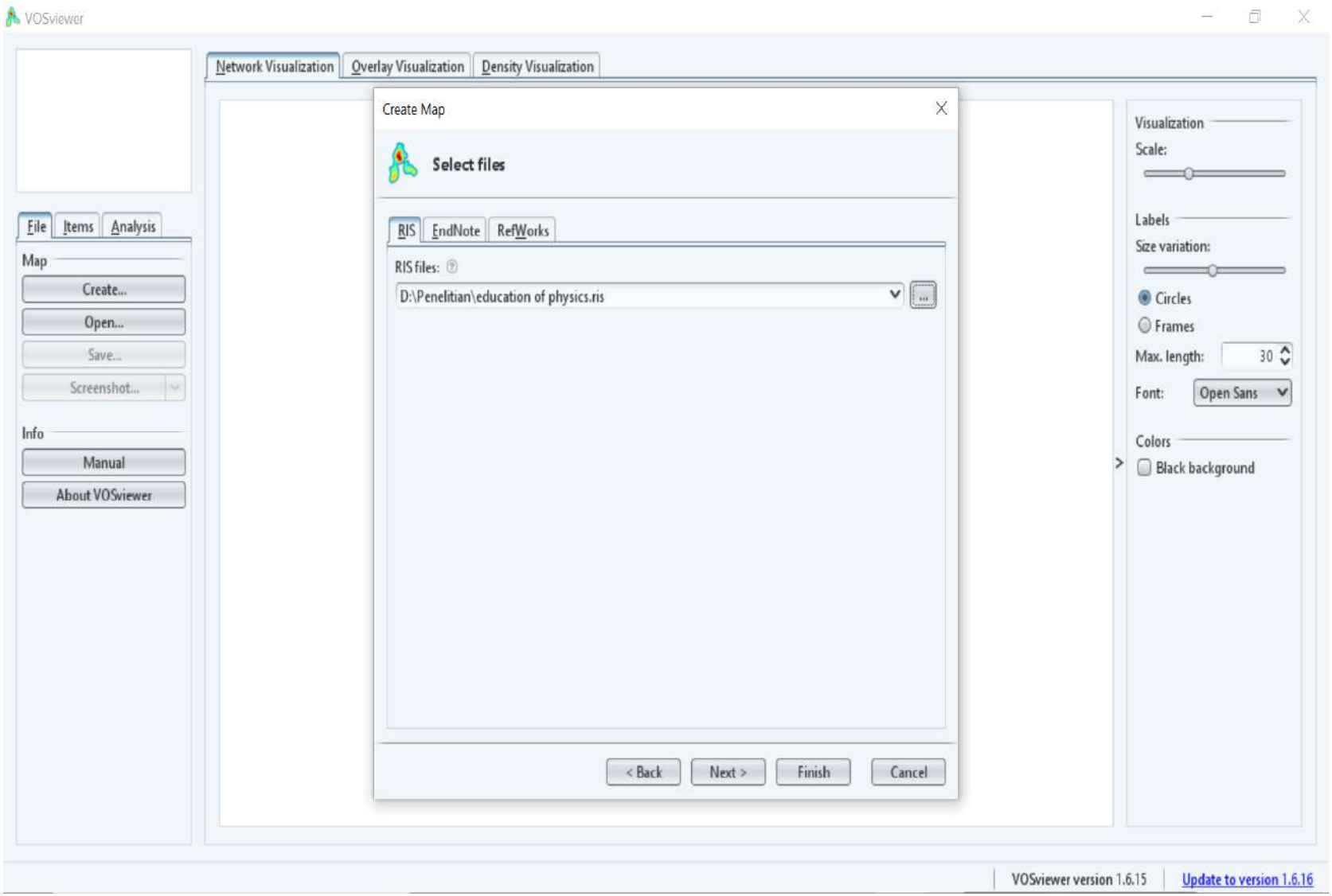


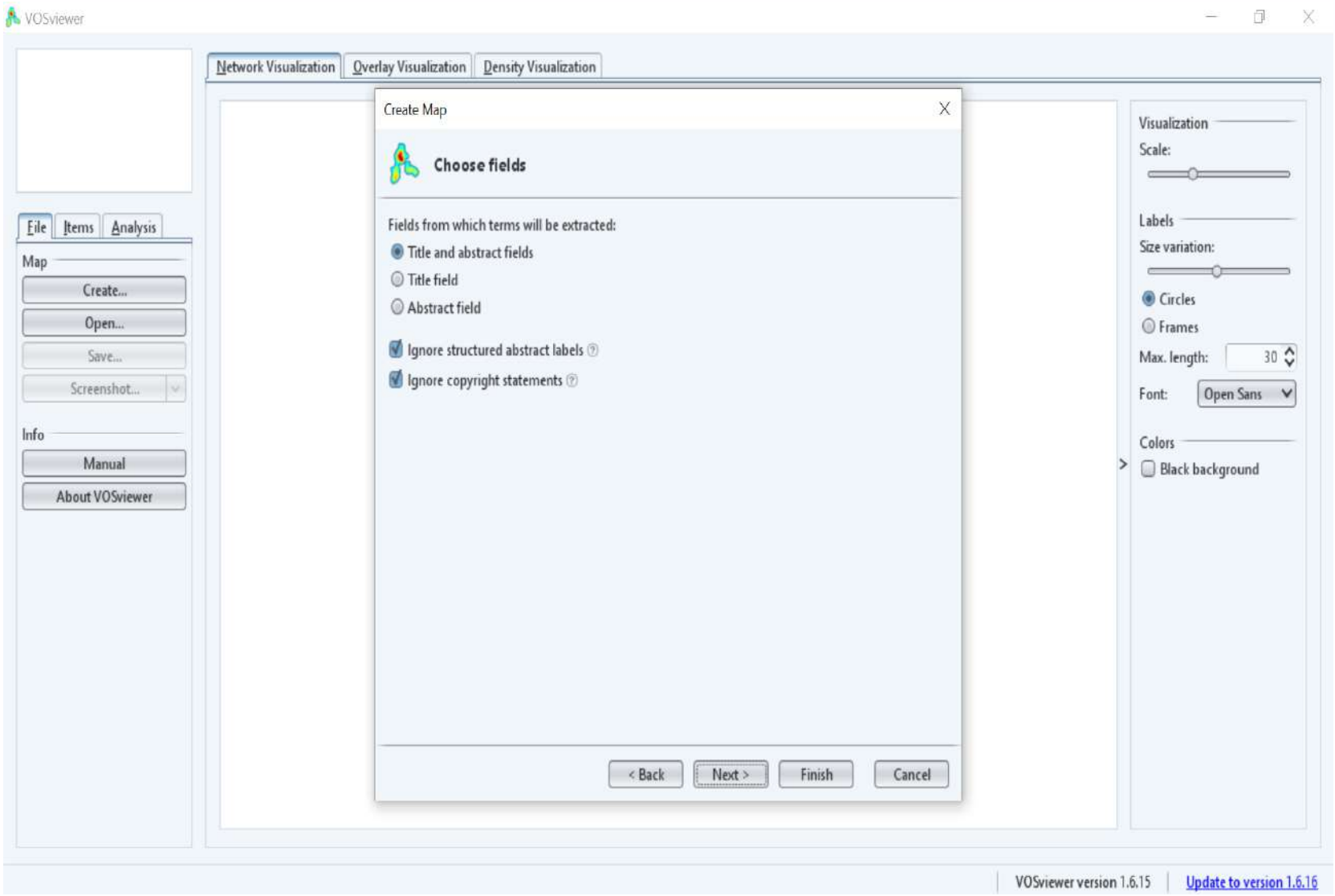
# 3. VOSviewer

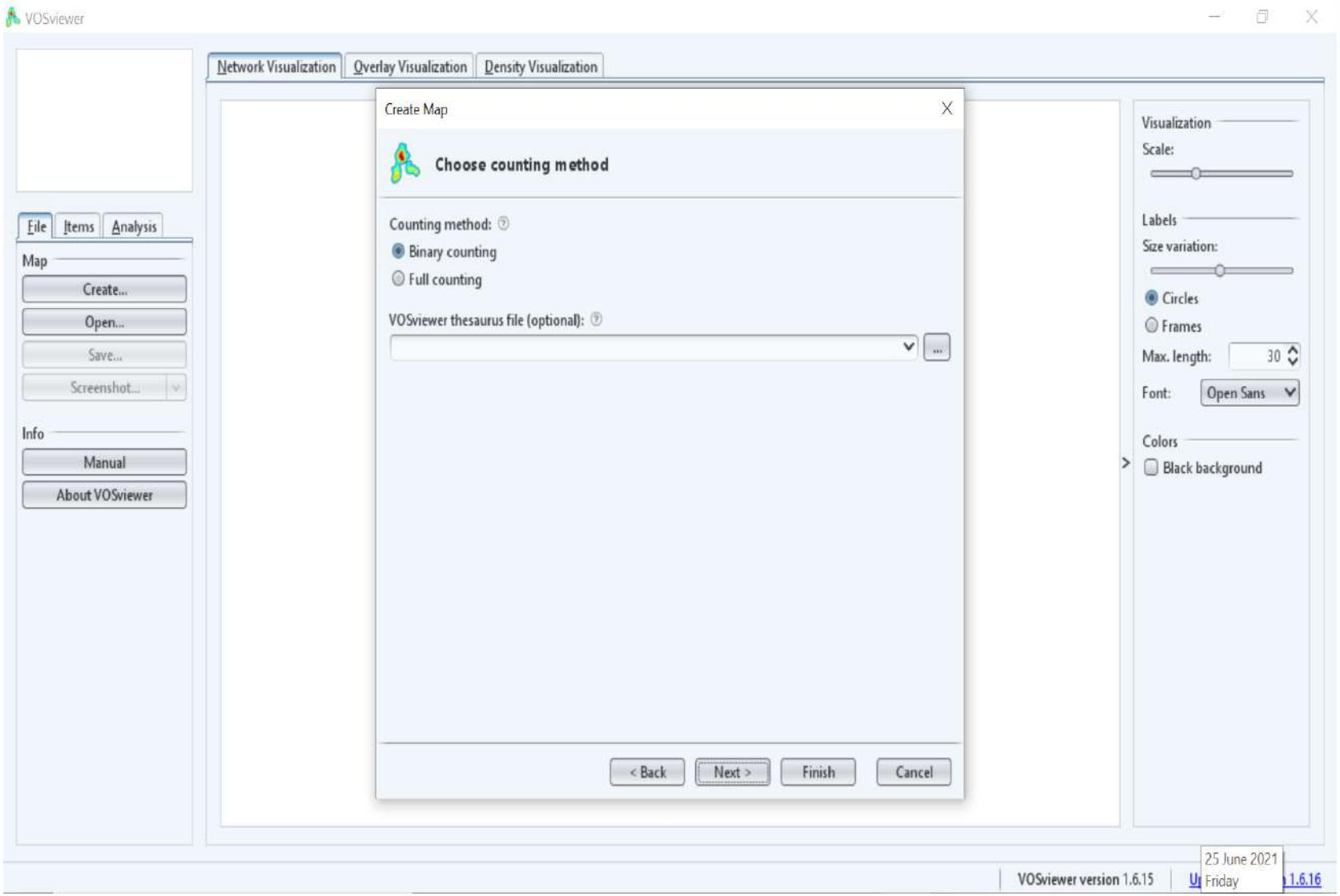

VOSviewer
Network Visualization
Overlay Visualization
Density Visualization
File
Items
Analysis
Map
Create...
Open...
Save...
Screenshot...
Info
Manual
About VOSviewer
Visualization
Scale:
Labels
Size variation:
Circles
Frames
Max. length:
30
Font:
Open Sans
Colors
Black background
VOSviewer version 1.6.15
Update to version 1.6.16

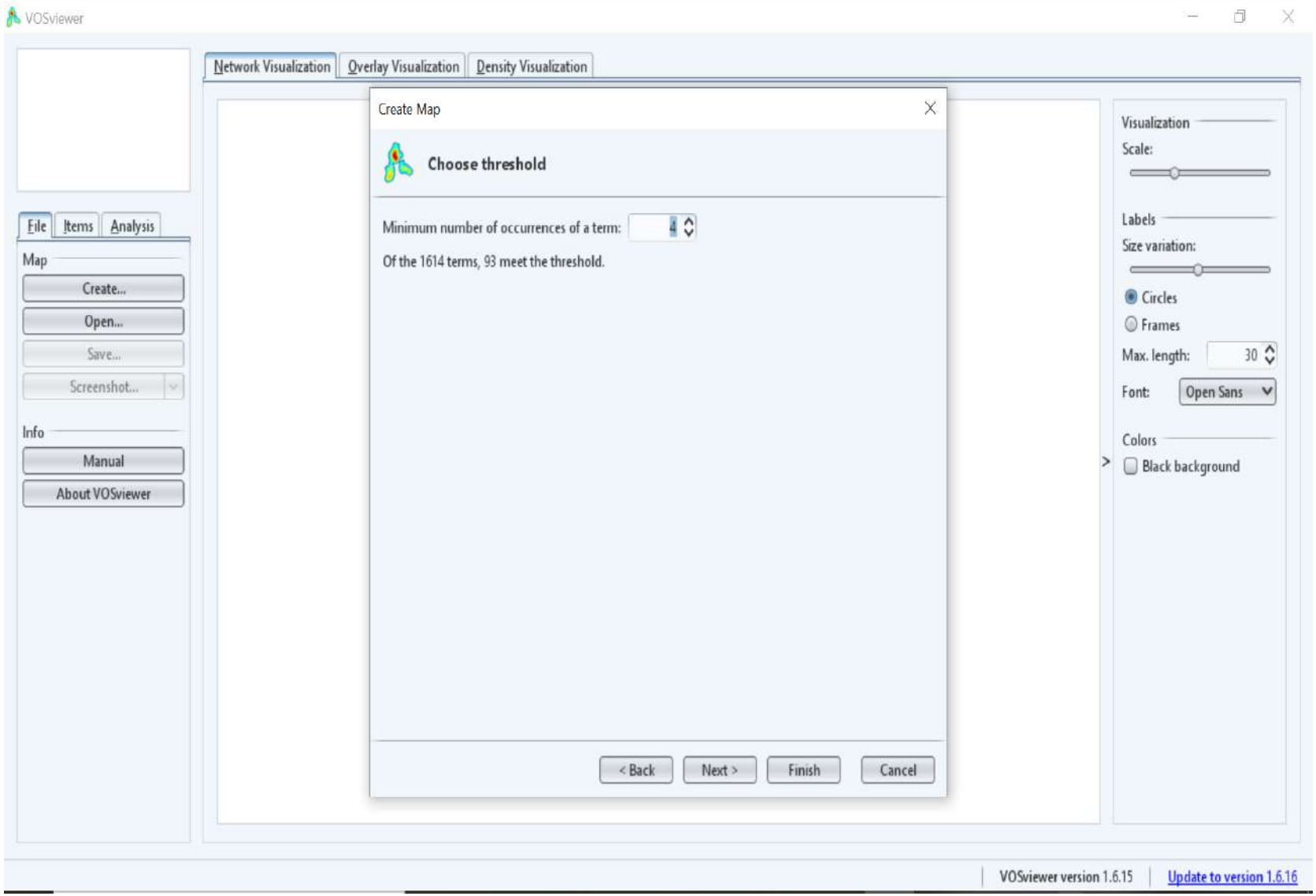

VOSviewer
Network Visualization
Overlay Visualization
Density Visualization
File
Items
Analysis
Map
Create...
Open...
Save...
Screenshot...
Info
Manual
About VOSviewer
Create Map
Choose type of data
Create a map based on network data
Choose this option to create a map based on network data.
Create a map based on bibliographic data
Choose this option to create a co-authorship, keyword co-occurrence, citation, bibliographic coupling, or co-citation map based on bibliographic data.
Create a map based on text data
Choose this option to create a term co-occurrence map based on text data.
< Back
Next >
Finish
Cancel
Visualization
Scale:
Labels
Size variation:
Circles
Frames
Max. length:
30
Font:
Open Sans
Colors
Black background
VOSviewer version 1.6.15
Update to version 1.6.16

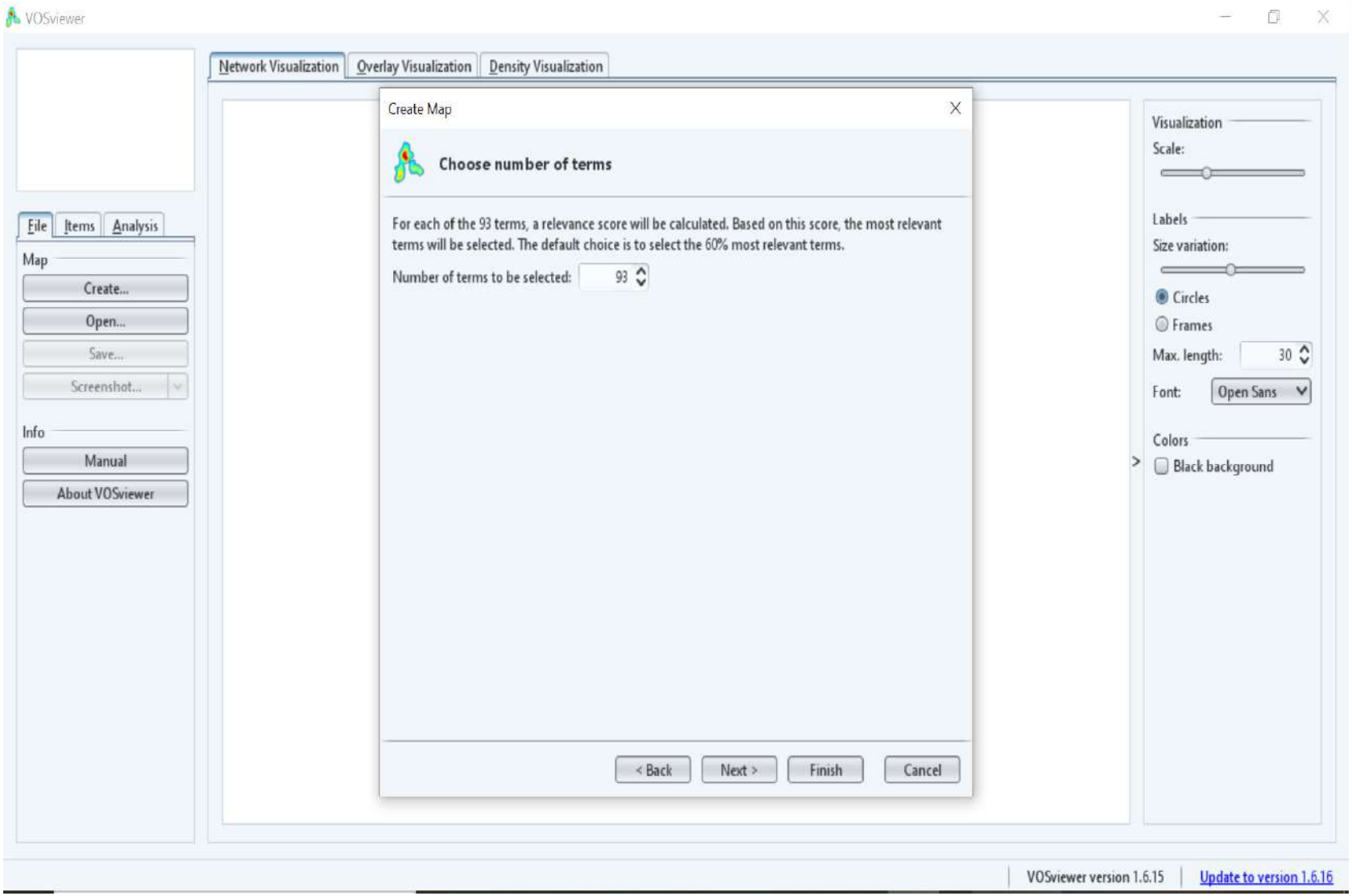

VOSviewer
Network Visualization
Overlay Visualization
Density Visualization
File
Items
Analysis
Map
Create...
Open...
Save...
Screenshot...
Info
Manual
About VOSviewer
Create Map
Choose data source
Read data from VOSviewer files
Supported file types: VOSviewer corpus and scores files.
Read data from bibliographic database files
Supported file types: Web of Science, Scopus, Dimensions, and PubMed.
Read data from reference manager files
Supported file types: RIS, EndNote, and RefWorks.
Download data through API
Supported APIs: Microsoft Academic, Crossref, Europe PMC, Semantic Scholar, OCC, COCI, and Wikidata.
< Back
Next >
Finish
Cancel
Visualization
Scale:
Labels
Size variation:
Circles
Frames
Max. length:
30
Font:
Open Sans
Colors
Black background
VOSviewer version 1.6.15
Update to version 1.6.16

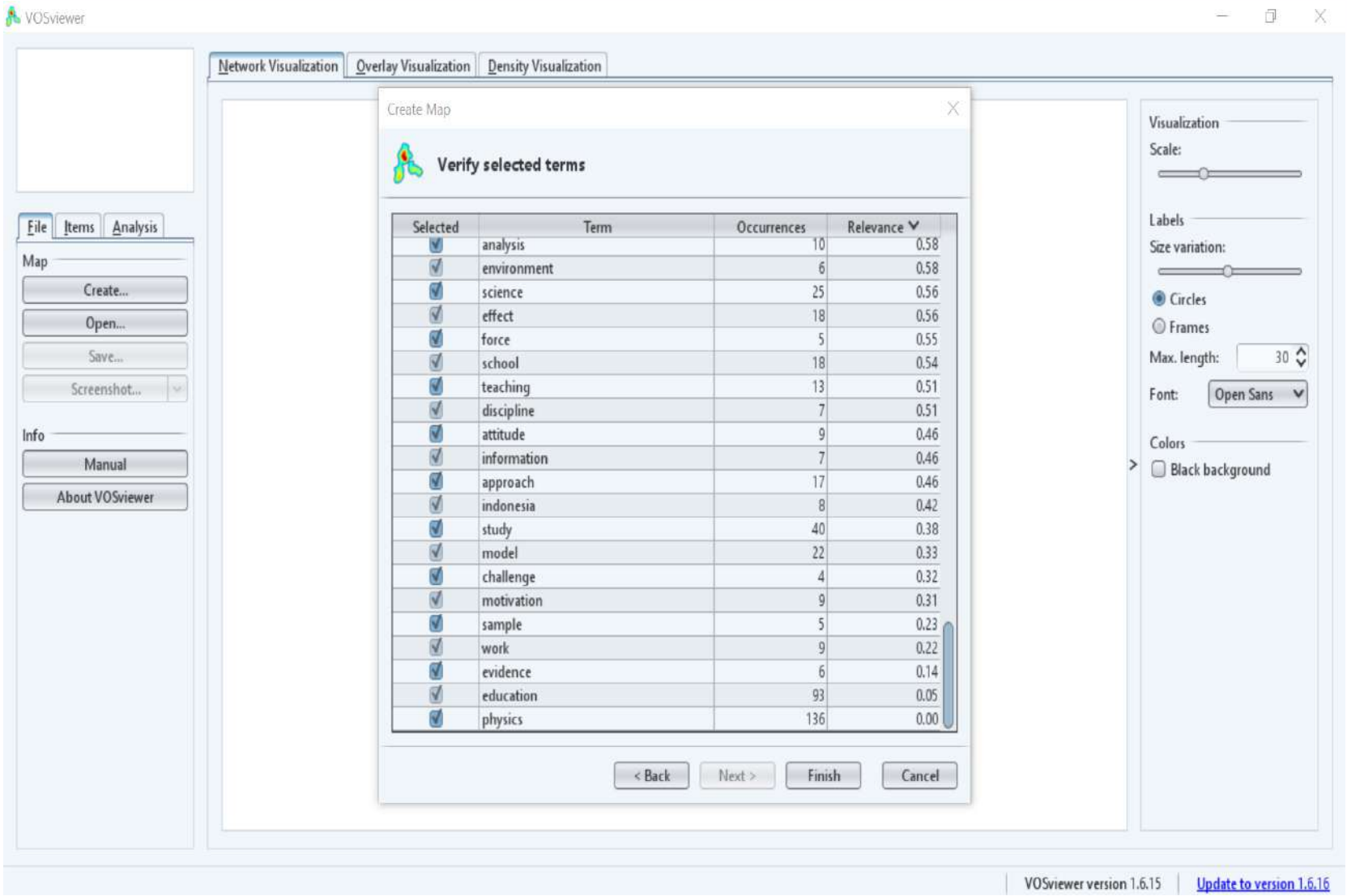

VOSviewer
Network Visualization
Overlay Visualization
Density Visualization
File
Items
Analysis
Map
Create...
Open...
Save...
Screenshot...
Info
Manual
About VOSviewer
Create Map
Select files
RIS
EndNote
RefWorks
RIS files:
D:\Penelitian\education of physics.ris
< Back
Next >
Finish
Cancel
Visualization
Scale:
Labels
Size variation:
Circles
Frames
Max. length:
30
Font:
Open Sans
Colors
Black background
VOSviewer version 1.6.15
Update to version 1.6.16

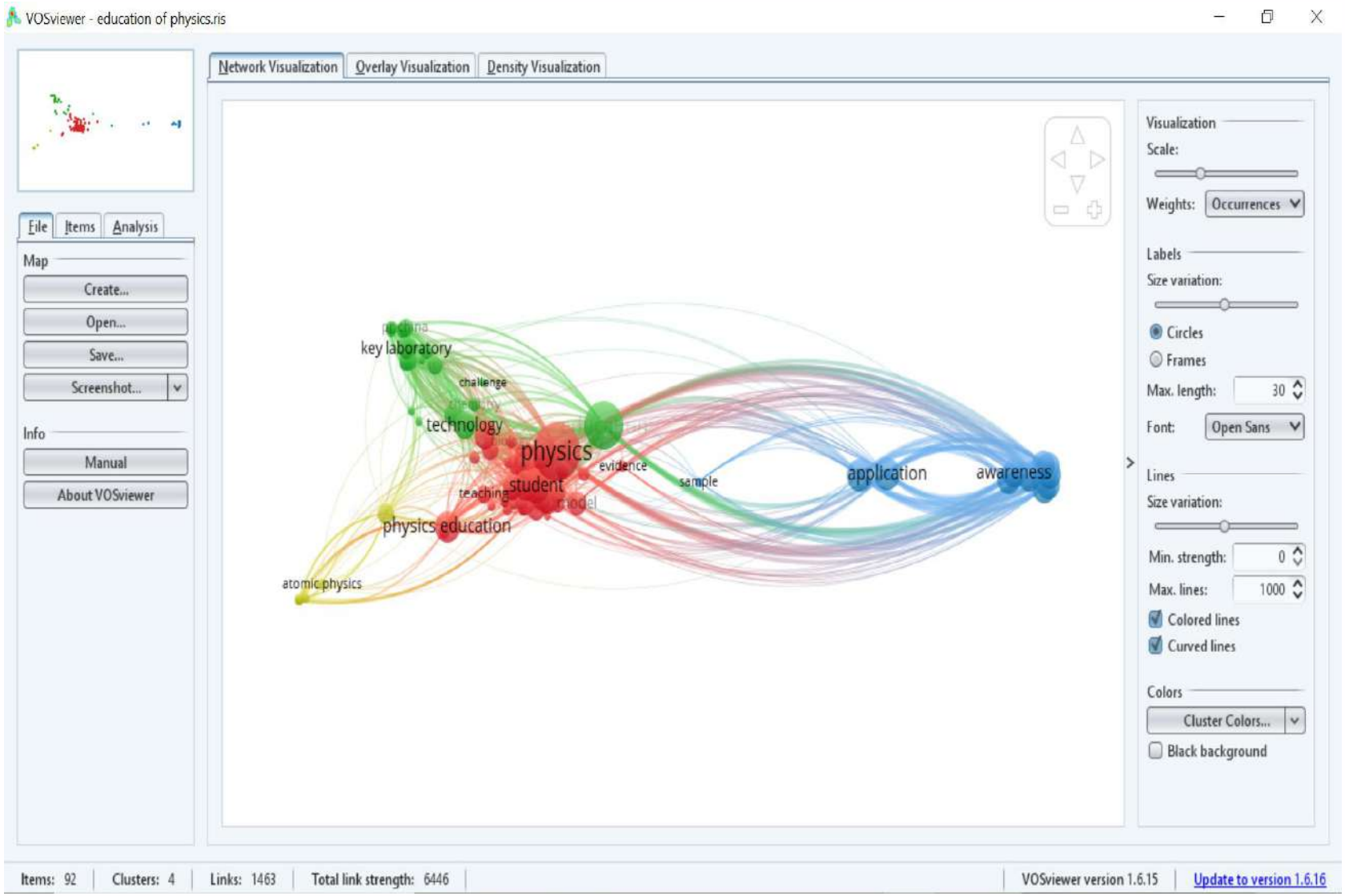

VOSviewer
Network Visualization
Overlay Visualization
Density Visualization
File
Items
Analysis
Map
Create...
Open...
Save...
Screenshot...
Info
Manual
About VOSviewer
Create Map
Choose fields
Fields from which terms will be extracted:
Title and abstract fields
Title field
Abstract field
Ignore structured abstract labels
Ignore copyright statements
< Back
Next >
Finish
Cancel
Visualization
Scale:
Labels
Size variation:
Circles
Frames
Max. length:
30
Font:
Open Sans
Colors
Black background
VOSviewer version 1.6.15
Update to version 1.6.16

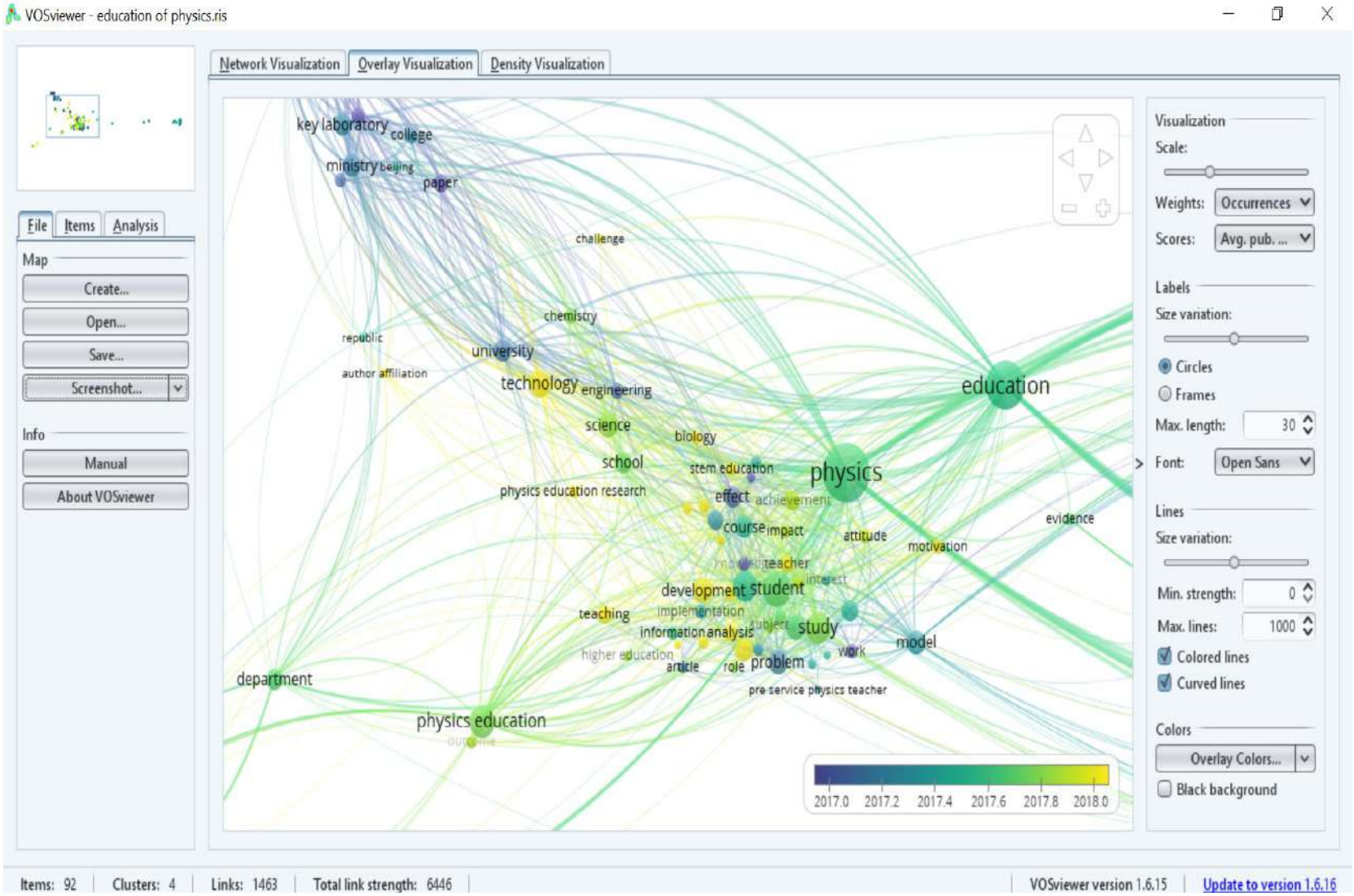

VOSviewer
Network Visualization
Overlay Visualization
Density Visualization
File
Items
Analysis
Map
Create...
Open...
Save...
Screenshot...
Info
Manual
About VOSviewer
Create Map
Choose counting method
Counting method:
Binary counting
Full counting
VOSviewer thesaurus file (optional):
< Back
Next >
Finish
Cancel
Visualization
Scale:
Labels
Size variation:
Circles
Frames
Max. length:
30
Font:
Open Sans
Colors
Black background
25 June 2021
Friday
VOSviewer version 1.6.15


VOSviewer
Network Visualization
Overlay Visualization
Density Visualization
File
Items
Analysis
Map
Create...
Open...
Save...
Screenshot...
Info
Manual
About VOSviewer
Create Map
Choose threshold
Minimum number of occurrences of a term: 4
Of the 1614 terms, 93 meet the threshold.
< Back
Next >
Finish
Cancel
Visualization
Scale:
Labels
Size variation:
Circles
Frames
Max. length: 30
Font: Open Sans
Colors
Black background
VOSviewer version 1.6.15
Update to version 1.6.16


VOSviewer
Network Visualization
Overlay Visualization
Density Visualization
File
Items
Analysis
Map
Create...
Open...
Save...
Screenshot...
Info
Manual
About VOSviewer
Create Map
Choose number of terms
For each of the 93 terms, a relevance score will be calculated. Based on this score, the most relevant terms will be selected. The default choice is to select the 60% most relevant terms.
Number of terms to be selected: 93
< Back
Next >
Finish
Cancel
Visualization
Scale:
Labels
Size variation:
Circles
Frames
Max. length: 30
Font: Open Sans
Colors
Black background
VOSviewer version 1.6.15
Update to version 1.6.16


VOSviewer
Network Visualization
Overlay Visualization
Density Visualization
File
Items
Analysis
Map
Create...
Open...
Save...
Screenshot...
Info
Manual
About VOSviewer
Create Map
Verify selected terms
Selected
Term
Occurrences
Relevance
analysis 10 0.58
environment 6 0.58
science 25 0.56
effect 18 0.56
force 5 0.55
school 18 0.54
teaching 13 0.51
discipline 7 0.51
attitude 9 0.46
information 7 0.46
approach 17 0.46
indonesia 8 0.42
study 40 0.38
model 22 0.33
challenge 4 0.32
motivation 9 0.31
sample 5 0.23
work 9 0.22
evidence 6 0.14
education 93 0.05
physics 136 0.00
< Back
Next >
Finish
Cancel
Visualization
Scale:
Labels
Size variation:
Circles
Frames
Max. length: 30
Font: Open Sans
Colors
Black background
VOSviewer version 1.6.15
Update to version 1.6.16


VOSviewer - education of physics.ris
Network Visualization
Overlay Visualization
Density Visualization
File
Items
Analysis
Map
Create...
Open...
Save...
Screenshot...
Info
Manual
About VOSviewer
key laboratory
challenge
technology
physics
evidence
sample
application
awareness
student
teaching
model
physics education
atomic physics
Visualization
Scale:
Weights:
Occurrences
Labels
Size variation:
Circles
Frames
Max. length:
30
Font:
Open Sans
Lines
Size variation:
Min. strength:
0
Max. lines:
1000
Colored lines
Curved lines
Colors
Cluster Colors...
Black background
Items: 92
Clusters: 4
Links: 1463
Total link strength: 6446
VOSviewer version 1.6.15
Update to version 1.6.16


VOSviewer - education of physics.ris
Network Visualization
Overlay Visualization
Density Visualization
File
Items
Analysis
Map
Create...
Open...
Save...
Screenshot...
Info
Manual
About VOSviewer
key laboratory
college
ministry
beijing
paper
challenge
chemistry
republic
university
author affiliation
technology
engineering
education
science
biology
school
stem education
physics
physics education research
effect
achievement
course
impact
attitude
motivation
evidence
teacher
interest
development
student
teaching
implementation
information
analysis
subject
study
model
higher education
article
role
problem
work
pre service physics teacher
department
physics education
outcome
2017.0
2017.2
2017.4
2017.6
2017.8
2018.0
Visualization
Scale:
Weights:
Occurrences
Scores:
Avg. pub. ...
Labels
Size variation:
Circles
Frames
Max. length:
30
Font:
Open Sans
Lines
Size variation:
Min. strength:
0
Max. lines:
1000
Colored lines
Curved lines
Colors
Overlay Colors...
Black background
Items: 92
Clusters: 4
Links: 1463
Total link strength: 6446
VOSviewer version 1.6.15
Update to version 1.6.16