

Research Intelligence

# SciVal

## Quick Reference Guide



SciVal provides access to the research performance of thousands of research institutions and their associated researchers from 231 nations worldwide—so you can visualize research performance, benchmark relative to peers, develop strategic partnerships, identify and analyze new, emerging research trends, and create uniquely tailored reports.

SciVal provides access to the research performance of thousands of research institutions and their associated researchers from 231 nations worldwide. A web-based analytics solution with unparalleled power and flexibility, SciVal enables you to analyze the world of research to inform research strategy and planning and drive performance.

## Data source

SciVal is based on publication and COUNTER compliant usage data from Scopus, the world's largest curated abstract and citation database, as well as patent-article citations, awarded grant data and mass media mentions from NewsFlo.

SciVal uses Scopus data from 1996 to present, covering over 50 million records from more than 5000 publishers worldwide. These include:

- 23,500+ peer-reviewed journals
- 300+ trade publications
- 194,000+ books
- 740+ book series
- 9+ million conference papers

## Metrics

SciVal offers an extensive array of simple and more sophisticated metrics, including [Snowball Metrics](#),<sup>1</sup> which were defined through an academic-industry partnership to enable their confident and appropriate use in strategic decision making and benchmarking.

For further information about the metrics available in SciVal and how to use them, please see the [Research Metrics Guidebook](#), as well as the [Usage and Patent Metrics Guidebook](#).

1. [snowballmetrics.com](http://snowballmetrics.com)



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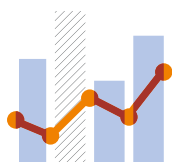
# 1.0 – Build your views on global research



## Visualize research performance

Access research performance summaries of any desired research entity, identify and analyze their unique research strengths and multidisciplinary research areas.

- Quickly attain at-a-glance, standardized Reports
- Access Topic maps for all Institutions and Countries to identify where they are currently active and which Topics have high momentum



## Benchmark and monitor progress

Compare any entity's strengths and areas for improvement through a diverse array of metrics and subject areas and monitor progress over time.

- Perform in-depth analyses on any entity to benchmark progress through a flexible array of metrics
- Monitor and evaluate your strengths and areas for improvement to help develop, plan, manage and execute your research strategy



## Conduct a portfolio Topic analysis

The Topic Prominence in Science feature enables you to run a portfolio analysis to see which research Topics your institution is currently active in, and which Topics have high momentum, and so are likely to be well-funded.<sup>1</sup>

- See Topic overviews for entities such as institutions, countries and researchers
- Get insight into which researchers are active in specific Topics, which Topics your peers and competitors are active in and the related Topics of which you should be aware



## Develop collaborative partnerships

Identify and analyze existing and potential collaboration opportunities based on publication output and citation impact.

- Explore your institution's current partnerships and identify potential partnership opportunities through the interactive map view
- Identify your most active collaborative institutions and co-author details by drilling into specific subject areas and self-defined Research Areas



## Analyze research trends

Analyze the research trends of any self or pre-defined Research Area, Publication Set, Topic or Topic Cluster with citation, publications and usage data, to discover key researchers, rising stars and current developments in fields of interest.

- Analyze a Research Area, Topic or Topic Cluster, then dig deeper into the activity and impact of the institutions, countries, authors and Scopus Sources involved
- Usage and keyphrase information complements citations to give a more complete picture of research performance



## Create customized Reports

Create analyses from across the modules, combine a selection of analyses to create uniquely tailored Reports. Save your most utilized reports in SciVal to export and share whenever you need it.

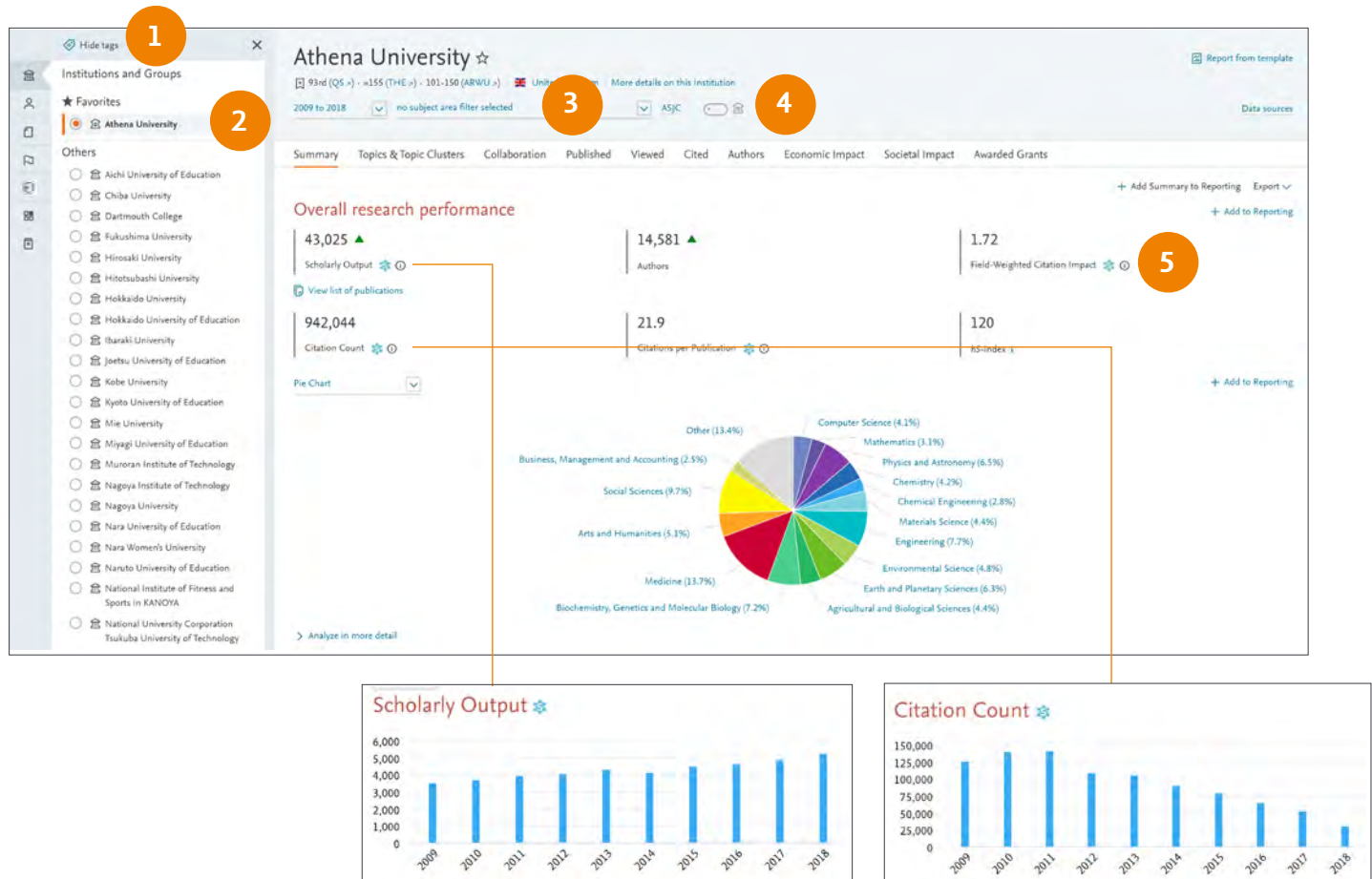
- Edit the analyses, adding and removing entities, changing the year range and/or selecting more metrics, and save
- Share Reports with other SciVal users within your Institution

1. [sciencedirect.com/science/article/pii/S1751157717302110](https://www.sciencedirect.com/science/article/pii/S1751157717302110)



# 1.1 – Visualize research performance

Research performance summaries of any desired research entity such as Institutions, Countries, Research Groups and Topics.



Overview tab provides at-a-glance research performance overviews of any selected entity

1. Entity selection panel allows you to select any entity of interest from:

- Institutions and Groups
- Researchers and Groups
- Countries and Groups
- Research Areas and Topics
- Scopus Sources

Add an entity such as an Institution or Country by typing the name in the search box. SciVal will provide you with a list of pre-defined entities matching your search to choose from.

2. Select your desired year range from:

- 3 years\*
- 5 years\*
- 10 years
- \*+current year and beyond

3. Filter your chosen subject classification by subject area with the default being the Scopus All Subject Journal Classification (ASJC). You can also choose from the Fields of Research (FoR), Fields of Research and Development (FORD), Research Excellence Framework (REF) 2014, QS, THE or KAKEN classifications.

4. Filter by 'Home Institution' to include only publications affiliated with your own institution

5. Click the information icon to learn more about a metric,



Athena University ★ Report from template

93rd (QS) - 155 (THE) - 101-150 (ARWU) United Kingdom [More details on this Institution](#)

2014 to 2019 no subject area filter selected ASJC Data sources

Summary Topics & Topic Clusters **Collaboration** Published Viewed Cited Authors Economic Impact Societal Impact Awarded Grants

Overall **Top collaborating institutions** 6 7

### Collaboration

Scholarly Output at the Athena University, by amount of international, national and institutional collaboration + Add to Reporting Shortcuts

Metric	Scholarly Output	Citations	Citations per Publication	Field-Weighted Citation Impact
International collaboration	52.0%	14,937	223,127	14.9
Only national collaboration	23.3%	6,682	67,664	10.1
Only institutional collaboration	11.9%	3,400	29,392	8.6
Single authorship (no collaboration)	12.8%	3,680	12,413	3.4

### Academic-Corporate Collaboration

Scholarly Output at the Athena University with both academic and corporate author affiliations + Add to Reporting Shortcuts

Metric	Scholarly Output	Citations	Citations per Publication	Field-Weighted Citation Impact
Academic-corporate collaboration	5.8%	1,650	33,960	20.6

2014 to 2019 no subject area filter selected ASJC Data sources

Summary Topics & Topic Clusters Collaboration Published Viewed Cited **Authors** Economic Impact Societal Impact Awarded Grants 9

### Authors

Top 500 authors, by Scholarly Output at the Athena University over the period 2014 to 2019. Note that some authors may no longer be affiliated with the Athena University. + Add to Reporting Export

Add to panel

Name	Scholarly Output	Most recent publication	Citations	h-index
Giannoudis, Peter Vasilios	262	2019	1,580	75
Conaghan, Philip G.	209	2019	4,648	85
Li, Lianhe	209	2019	1,443	35
Neville, Anne	195	2019	1,614	49
Davies, Alexander Giles	187	2019	1,887	52
Ford, Alexander Charles	169	2019	3,063	61

including its strengths and weaknesses

6. Overview module tabs provide a comprehensive understanding of entities based on the following themes:

- Overall Summary
- Topics & Topic Clusters
- Collaboration (6)
- Published
- Viewed
- Cited (7)

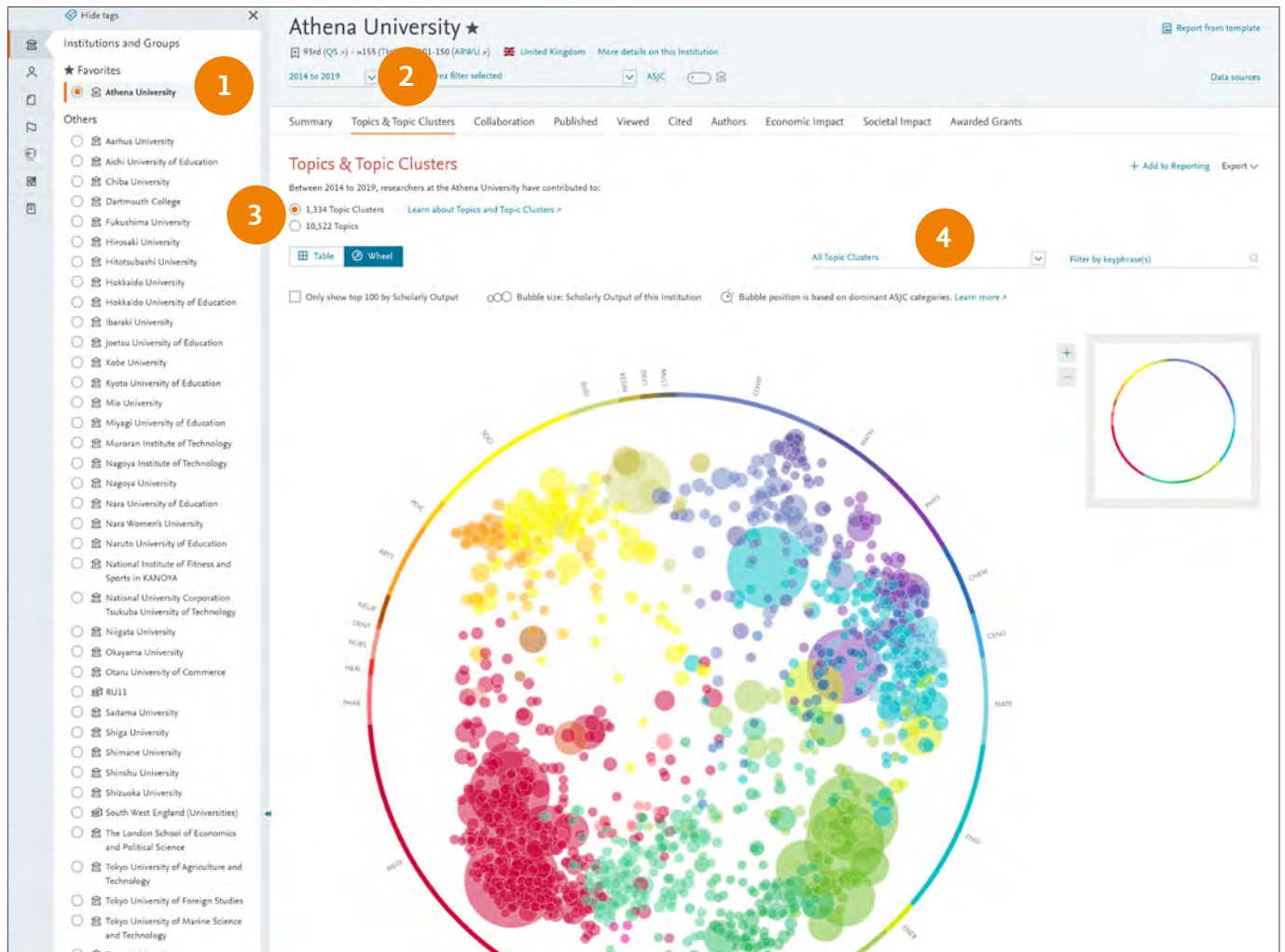
- Authors (8)
- Economic Impact
- Societal Impact (for Institutions)
- Awarded Grants (for Institutions and Countries)
- Institutions (for Countries)

9. Add to Reporting to create a Report based on several Analyses



# 1.2 – Conduct a portfolio Topic analysis

See which Topics your institution is currently active in, and which Topics have high momentum—therefore are more likely to be well-funded.<sup>1</sup> Get insight into which researchers are active in specific Topics, which Topics your peers and competitors are active in, and related Topics of which you should be aware.



1. Start in the Overview module and select an institution
2. Go to the Topics & Topics Clusters section to see which Topics the Institution has contributed to and is active in
3. Using the radio buttons you can either analyze individual Topics or the aggregated Topic Clusters
4. Limit to view the top x% of worldwide Topics or Topic Clusters by Prominence

1. [sciencedirect.com/science/article/pii/](https://www.sciencedirect.com/science/article/pii/)

Athena University ★ Report from template

93rd (QS) · 155 (THE) · 101-150 (ARWU) · United Kingdom [More details on this Institution](#)

2014 to 2019 no subject area filter selected ASJC Data sources

Summary **Topics & Topic Clusters** Collaboration Published Viewed Cited Authors Economic Impact Societal Impact Awarded Grants

### Topics & Topic Clusters

Between 2014 to 2019, researchers at the Athena University have contributed to:

1,334 Topic Clusters [Learn about Topics and Topic Clusters](#)  
 10,522 Topics

5
All Topic Clusters Filter by keyphrase(s)

Add to panel:

	At this Institution			Worldwide
Topic Cluster	Scholarly Output	Publication Share	Field-Weighted Citation Impact	Prominence percentile
<input type="checkbox"/> Rheumatoid Arthritis; Psoriasis; Patients TC.130 <span style="border: 1px solid orange; border-radius: 50%; padding: 2px 5px; font-weight: bold;">6</span>	476	1.67%	3.30	91.165
<input type="checkbox"/> Aerosols; Air Quality; Atmospheric Aerosols TC.42	443	1.07%	2.11	97.590
<input type="checkbox"/> Traffic Control; Transportation; Models TC.107	402	0.77%	1.51	93.708
<input type="checkbox"/> Obesity; Motor Activity; Child TC.18	399	0.53%	1.98	99.197
				98.929
				99.264

**Activity of the Athena University** X

Within: Rheumatoid Arthritis; Psoriasis; Patients TC.130 7 used for metrics: 2014 to 2019 | [Analyze Topic Cluster worldwide](#) 8

Summary **Authors** Topics

#### Performance

476 Scholarly Output [View list of publications](#)

3.30 Field-Weighted Citation Impact

340 International Collaboration

8,274 Views Count

14,508 Citation Count

91.165 Worldwide Topic Cluster Prominence

#### Collaboration

**International Collaboration**

Publications co-authored with institutions in other countries/regions

Athena University: 71.4%

**Academic-Corporate Collaboration**

Publications with both academic and corporate affiliations

Athena University: 23.3%

#### Top 15 keyphrases

Based on 476 publications

Relevance of keyphrase

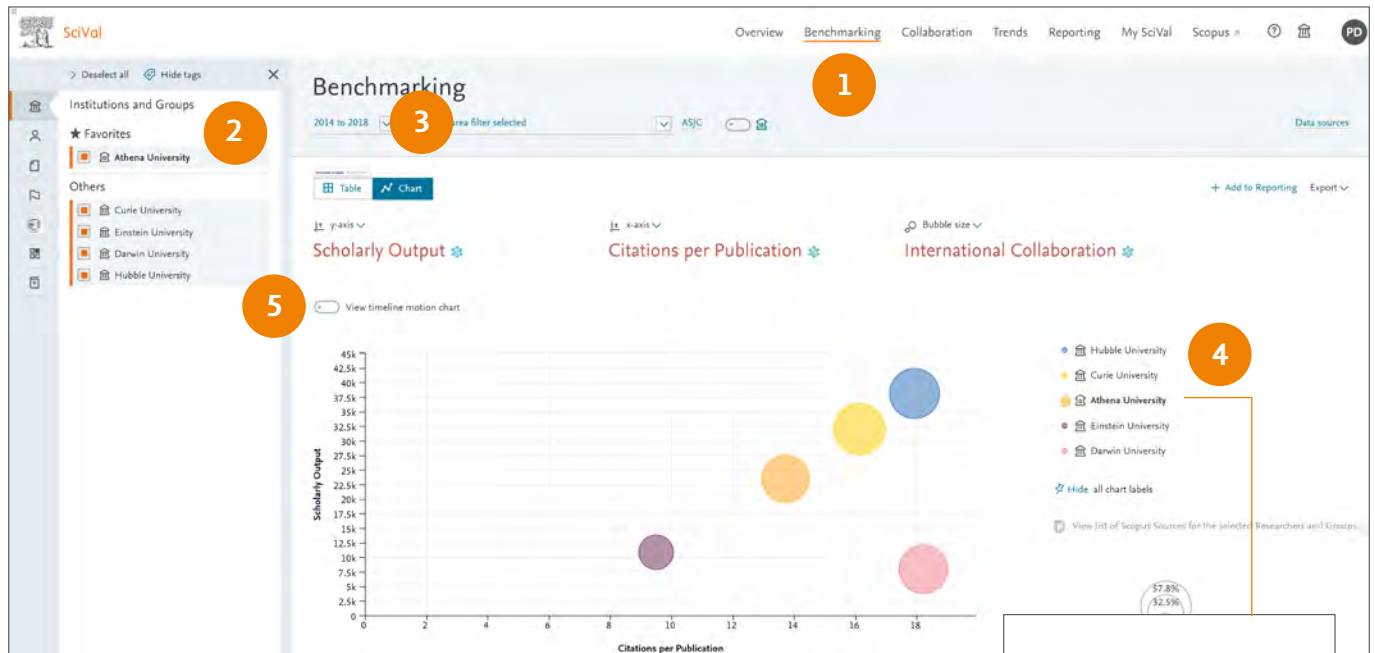
Arthritis, Psoriatic	0.25	0.5	0.75
Arthritis, Rheumatoid	0.25	0.5	0.75
Rheumatology	0.25	0.5	0.75
Joints	0.25	0.5	0.75
Disease	0.25	0.5	0.75
Antirheumatic Agents	0.25	0.5	0.75
Patients	0.25	0.5	0.75

5. Select the **Table view** to get an overview of the Topics or Topic Clusters ranked by Scholarly Output
6. Select a **Topic or Topic Cluster** and analyze it in further detail for an institution
7. Get a **quick overview of the Topic** for an Institution, the Field-Weight Citation Impact, the level of international collaboration and the underlying keyphrases sorted by relevance
8. Or analyze the Topic globally via the **Trends module** (see pg. 13)



# 1.3 – Benchmark and monitor progress

Assess your strengths and areas for improvement by analyzing custom selections of entities, metrics and subject areas enabling confident comparison and benchmarking.

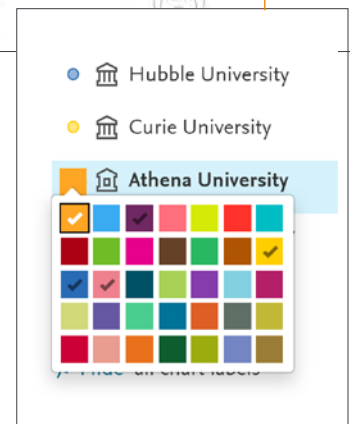


1. **Benchmarking module** provides advanced capabilities to perform flexible and in-depth analyses across a diverse set of entities, metrics and subject areas
2. **Using the entity selection panel**, select any desired combination of entities you wish to analyze and benchmark

**Add Institutions or Countries** by clicking the 'Add' link to search and SciVal will provide you with a list of pre-defined institutions and countries to select from

**Add Researchers, Publication Sets, Research Areas and Groups** by creating your own (see pages 15 and onwards)

3. **Select year range** from 1996 to the current year and beyond
4. **Show entity names** on the Chart by clicking the pin icon which appears after hovering on the entity name
5. **See progress over time** through the timeline motion chart



Select a country, region or 'World' to contextualize your relative performance, or create bespoke research areas to benchmark against a research topic.



# Benchmarking

2014 to 2018 | no subject area filter selected

5

ASJC

Data sources

Table | Chart

6

+ Add to Reporting | Export

8

Benchmark multiple metrics | Reset to one metric by Publication Year

Entity	Scholarly Output	Citations per Publication	International Collaboration	Academic-Corporate Collaboration	Academic-Corporate Collaboration Impact
Curie University	31,993	16.1	57.8	5.8	51.8
Einstein University	10,857	9.5	25.4	5.6	21.3
Darwin University	7,941	18.2	50.9	7.5	55.3
Athena University	23,460	13.7	50.7	5.8	24.4
Hubble University	38,109	17.9	54.1	6.1	39.5

View list of Scopus Sources for the selected R

### Add and manage metrics

Metrics to add

Type to filter

Show as field-weighted    Show as:  Percentage     Total value

Include self-citations    Include all publication types

- Academic-Corporate Collaboration (%)
- Academic-Corporate Collaboration Impact
- Awards Volume
- Citation Count
- Citations per Publication
- Cited Publications (%)
- Citing Patents Count
- Collaboration (%)

Metrics in the table

Add, remove or change view order. 22 metrics available

- Scholarly Output
- Outputs in Top Citation Percentiles (%)
- Academic-Corporate Collaboration Impact

Drag and drop metrics you want to add to the table.

7

Collaboration Published Viewed Cited

- Citation Count
- Field-Weighted Citation Impact
- Outputs in Top Citation Percentiles
- Publications in Journal Quartiles
- Publications in Top Journal Percentiles
- Citations per Publication
- Cited Publications
- h-indices
- Number of Citing Countries
- Collaboration Impact
- Academic-Corporate Collaboration Impact
- Citing-Patents Count
- Patent-Cited Scholarly Output
- Patent-Citations Count
- Patent-Citations per Scholarly Output

Economic Impact

Societal Impact

Awarded Grants

Outputs in Top Citation Percentiles

The number of publications of a selected entity that are highly cited, having reached a particular threshold of citations received.

[Learn more about this metric](#)

Show as field-weighted

Include self-citations

Show the outputs in top:

1%     5%     10%     25%

Show as:

Percentage     Total value

Include:

All publication types

Articles only

Articles and conference papers

Articles and reviews

Articles, reviews and conference papers

Articles, reviews, conference papers, books and book chapters

Books and book chapters

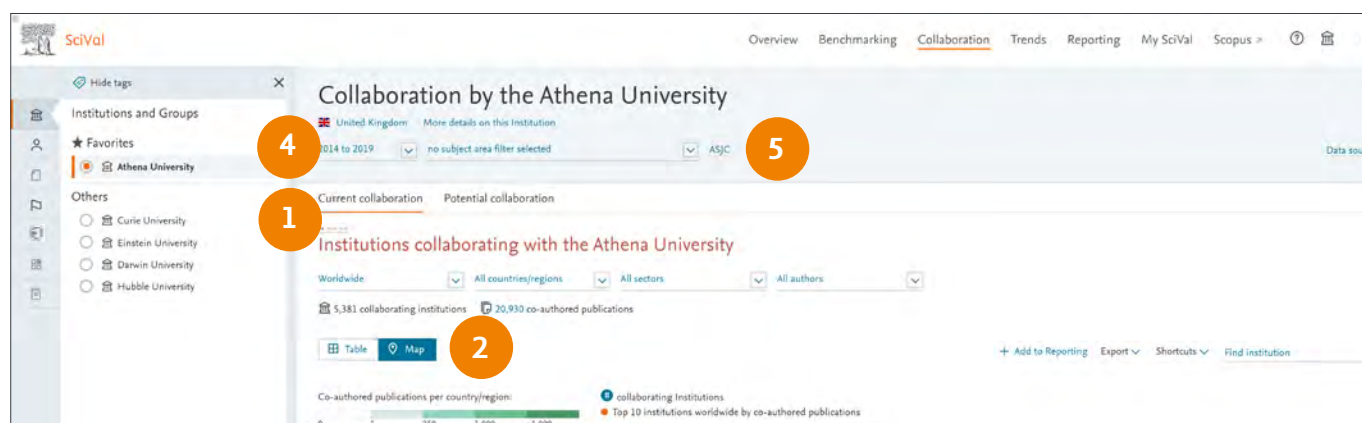
[Choose metric](#)

The numbers within the table are clickable, and will show you the underlying publication data.

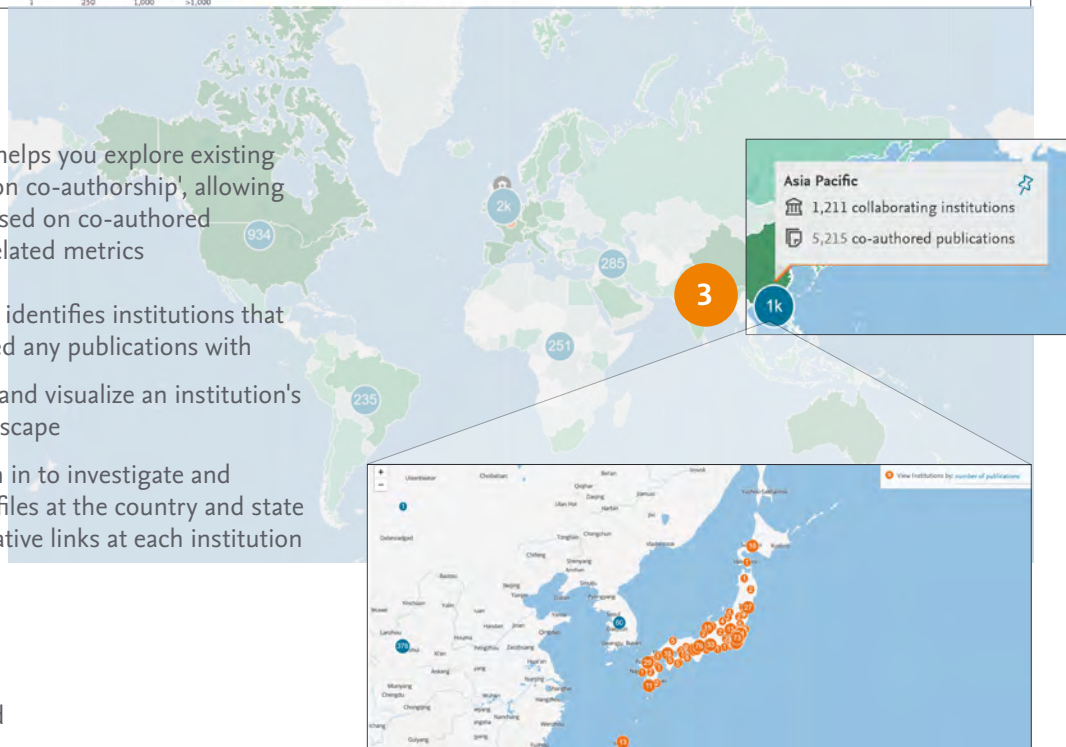


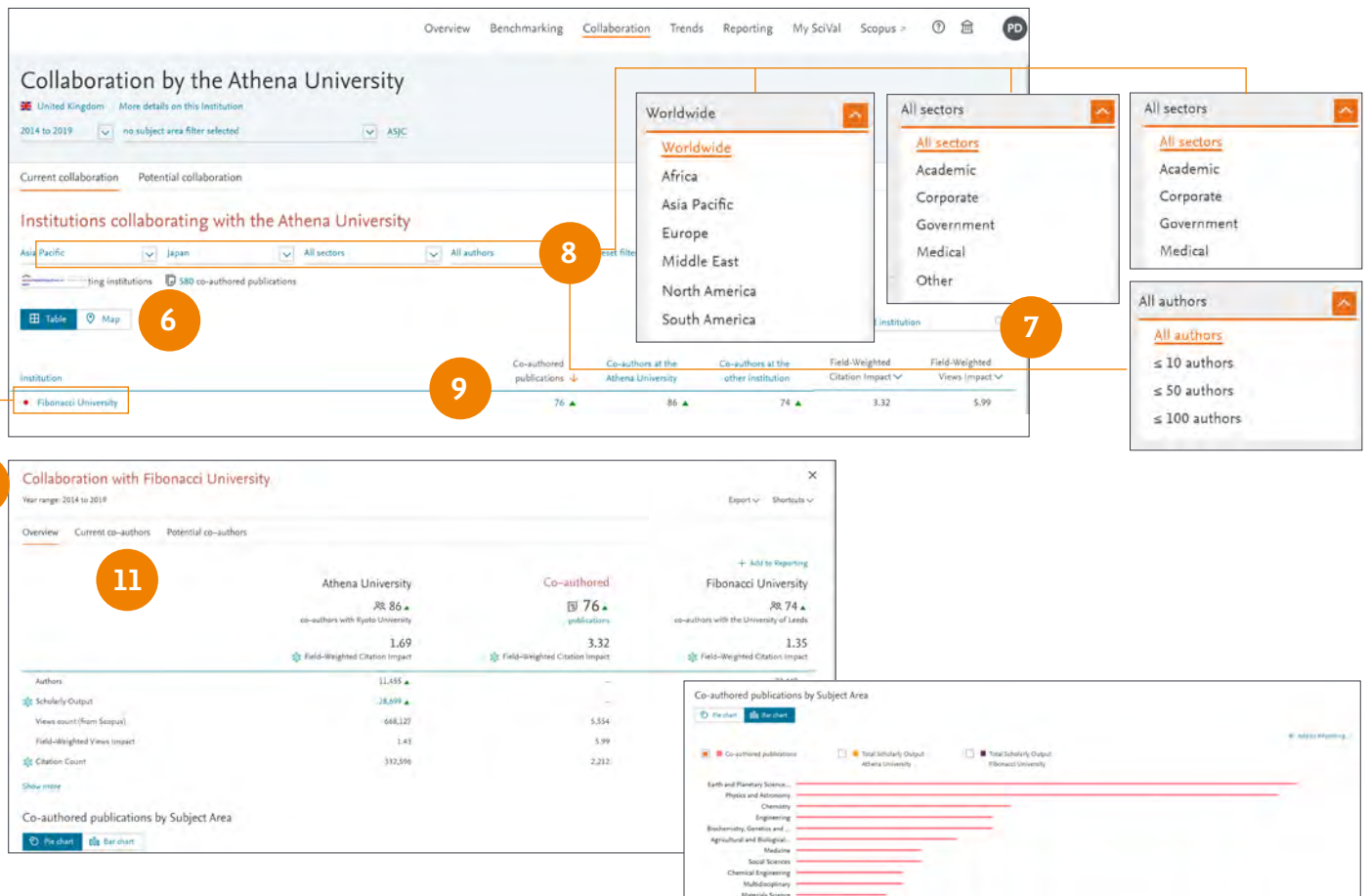
# 1.4 – Identify and evaluate existing and potential collaboration partners

Access a list of Institutions that you collaborate with or have the potential to collaborate with. Start with a worldwide view of your institution's collaboration landscape, and then zoom in to individual collaborating Institutions and Researchers globally. You can also use the subject area filters, including self-defined Research Areas to focus on current and potential collaborators aligned with key areas of focus.



1. **Current collaboration tab** helps you explore existing collaborative links, based on co-authorship, allowing you to rank institutions based on co-authored publications and impact related metrics  
  
**Potential collaboration tab** identifies institutions that you haven't yet co-authored any publications with
2. **Select the Map** to explore and visualize an institution's existing collaboration landscape
3. **Click on regions** and zoom in to investigate and visualize collaboration profiles at the country and state level, and see the collaborative links at each institution
4. **Select year range** from:  
 3 years\*  
 5 years\*  
 10 years  
 \*+current year and beyond
5. **Filter by subject** using any of the 7 subject classifications available or by self-defined Research Areas to identify current and potential collaborators aligned with key areas of focus





6. Select the table view to access the list of collaborating institutions along with some key metrics
7. Search institutions by name
8. Limit by region, country, number of authors and sector
9. Sort Institution list by:
  - Co-authored publications
  - Co-authors at selected institution
  - Co-authors at the other institution
  - Field-Weighted Citation Impact
  - Field-Weighted Views Impact
10. Select an Institution of interest to assess the collaborative links more fully across a range of metrics
11. Identify the key Researchers from each institution driving the collaborative links or potential new partners

### Evaluate your potential collaboration partners

Once you have identified Institutions and Researchers to potentially collaborate with, you can:

- Use the overview module to:
  - gain a balanced overview of the selected institutions or researchers
  - Identify other Researchers of interest
  - explore the institution's Topics and Topic Clusters
- Compare potential strategic partner institutions using the Benchmarking module to:
  - evaluate the selected institutions across a range of metrics
  - model teams and scenarios with researchers of interest
  - benchmark the teams and scenarios against potential competitors or peers
- Review the collaboration profiles of Institutions of interest using the Collaboration Module to:
  - identify other existing co-author relationships across all subjects
  - analyze collaborators per discipline and evaluate their success and potential further

# 1.5 – Analyze Research Trends

Analyze the research trends of any self or pre-defined Research Area, Publication Set, Topic or Topic Cluster with citation, publications and usage data, to discover key researchers, rising stars and current developments in fields of interest.

1. **Trends module** provides the ability to perform advanced Topic centric analysis of any Research Area, Publication Set, Topic or Topic Cluster
2. Using the **entity selection panel**, select the self- or pre-defined Research Area, Publication Set, Topic or Topic Cluster you wish to analyze
3. Select your desired year range from:
  - 3 years\*
  - 5 years\*
  - 10 years
  - \* + current year and beyond
4. **Summary tab** provides an overview of your Research Area, Publication Set, Topic or Topic Cluster of interest. Several key metrics are displayed at the top of the tab followed by a word cloud which provides a visual representation of the top 50 keyphrases within the area of interest
5. **Remaining tabs** provide insights into the selected Research Area, Publication Set, Topic or Topic Cluster across:
  - Institutions
  - Countries & Regions
  - Authors
  - Scopus Sources
  - Keyphrases
  - Related Topics (for Topics)
  - Topics (for Topic Clusters)
  - Funding Bodies (for ASJC pre-defined Research Areas)
6. Scroll down the page to see the most active Institutions, Authors, Countries and Scopus Sources related to the Research Area, Publication Set, Topic or Topic Cluster
7. **Institutions tab** details the Top 100 institutions as a table or

allows you to view the geographical distribution of the Top 100 institutions via the map view

8. **Keyphrases tab** allows you to analyze the Top 50 keyphrases relating to the area of interest
9. **Representative publications** when analyzing a Topic, allow you to focus on the 10 publications most strongly linked to the Topic of interest

## How are keyphrases calculated?

SciVal uses the Elsevier Fingerprint Engine (R) to extract keyphrases within the Research Area, Publication Set, Topic or Topic Cluster.

The text mining is done by applying a variety of Natural Language Processing techniques to the titles, abstracts and keywords of the documents in the Research Area, Publication Set, Topic or Topic Cluster in order to identify important concepts.

Concepts are matched against a unified thesaurus spanning all major disciplines. For each document, we take the list of standardized keyphrases and select which ones are important based on Inverse Document Frequency (IDF). This technique incorporates a factor that diminishes the weight of words that occur frequently in the document set, and increases the importance of words that occur rarely. Each keyphrase is then given a relevance between 0 and 1, with 1 given to the most frequently occurring keyphrase. Remaining keyphrases are given a value based on their relative frequency.

In SciVal, we take a weighted list of keyphrases per publication and aggregate this to each entity such as a Research Area or Topic.

SciVal Overview Benchmarking Collaboration Trends Reporting My SciVal Scopus

2 3 1

### Topic Cluster TC.0 Algorithms; Computer Vision; Models

2009 to 2018

Summary Institutions Countries & Regions Authors Scopus Sources Keyphrases Topics 5

4 7 8

This Topic Cluster is based on 270 Topics. Learn about the clustering method.

Overall research performance

259,204 Scholarly Output

1.51 Field-Weighted Citation Impact

42,455 International Collaboration

2,427,849 2,889,580 99,465

5

### Topic character

Keyphrase analysis Representative publications

Top 50 keyphrases by relevance, based on 2,705 publications | Learn about keyphrase calculations

9

### Topic character

Keyphrase analysis Representative publications

Top 10 representative publications, published 2014 - 2019 | Learn about Representative publications calculation

Publication	Citation
Substituted hydroxyapatites for biomedical applications: A review Sun, M. (2015) <i>Colloidal International</i> , 41 (3), pp. 1300-1322. View in Scopus	276
Advances in synthesis of calcium phosphate crystals with controlled size and shape Lin, R., Wu, Q., Cheng, J. (2014) <i>Acta Biomaterialia</i> , 10 (2), pp. 4971-4982. View in Scopus	189
Extracting hydroxyapatite and its precursors from natural resources Alam, M., Ahmad, R., Shah, I. and 2 more (2014) <i>Journal of Materials Science</i> , 49 (2), pp. 1340-1475. View in Scopus	130

### Most active Authors

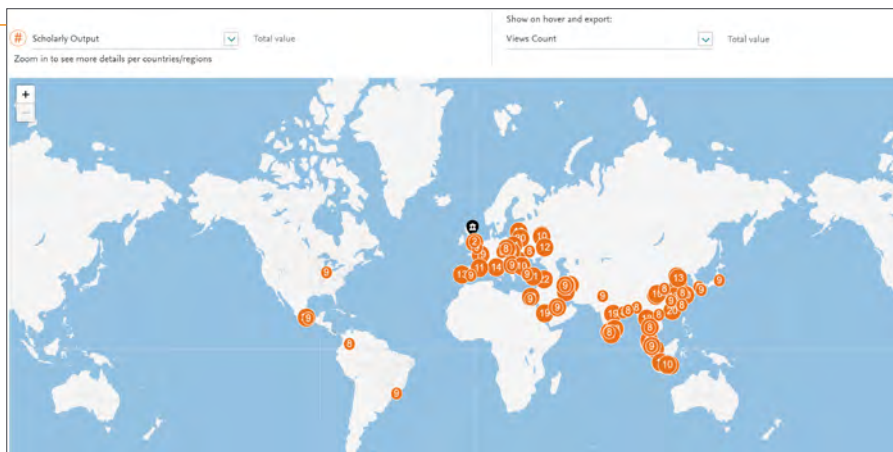
2009 2010 2011 2012 2013 2014 2015 2016 2017 2018

- Tao, Daicheng 442
- Yan, Shucheng 418
- Li, Kunlong 394
- Gao, Wan 309
- van Gool, Luc J. 306

### Most active Scopus Sources

2009 2010 2011 2012 2013 2014 2015 2016 2017 2018

- Lecture Notes in Computer Science 17,903
- Proceedings of SPIE - The International Society for Optical Engineering 7,423
- Proceedings - International Conference on Image Processing, ICIP 4,467
- Proceedings of the IEEE Computer Society Conference on Computer Vision and Pattern Recognition 4,010
- ACM International Conference Proceeding Series 2,761



# 2.0 – Working with entities

Use the entity selection panel, located on the left-hand side of the screen like a workspace to define, add, remove, organize and use all your entities of interest. You can choose from the thousands of pre-defined entities (Institutions, Countries, Scopus Sources) or define your own entities (Researchers, research teams, Publication Sets or Research Areas).

The screenshot shows the SciVal interface for Athena University. On the left, the 'Institutions and Groups' panel is visible, with a 'Clean this section' button highlighted by a red box and a red circle labeled '1'. Below this, a red circle labeled '2' points to a dialog box. The main dashboard displays 'Overall research performance' metrics: Scholarly Output (30,311), Citation Count (333,324), Authors (11,951), Citations per Publication (11.0), Field-Weighted Citation Impact (1.71), and h5-index (120). A pie chart shows the distribution of research areas, with 'Medicine' being the largest at 14.7%.

2

**!** Remove all the entities that are not Favorites in this section

This will not delete them.  
You can add them back into this selection panel at any time.

Don't show this again

Cancel > Remove >

## 1. Add entities

- Click the 'Add' link at the bottom of the currently open entity section
- Begin typing the name of the entity of interest and click the name when it appears in the search results
- Click the 'Define' link to define an entirely new entity

## 2. Remove entities

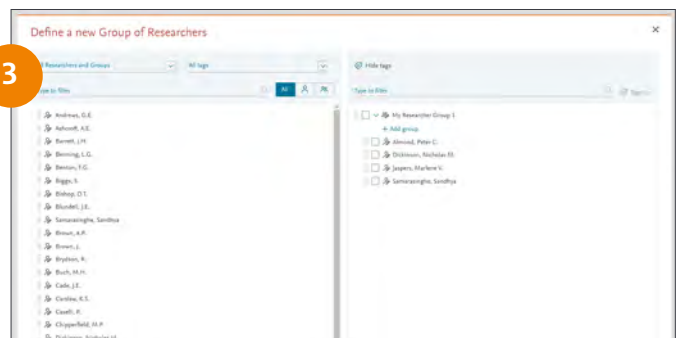
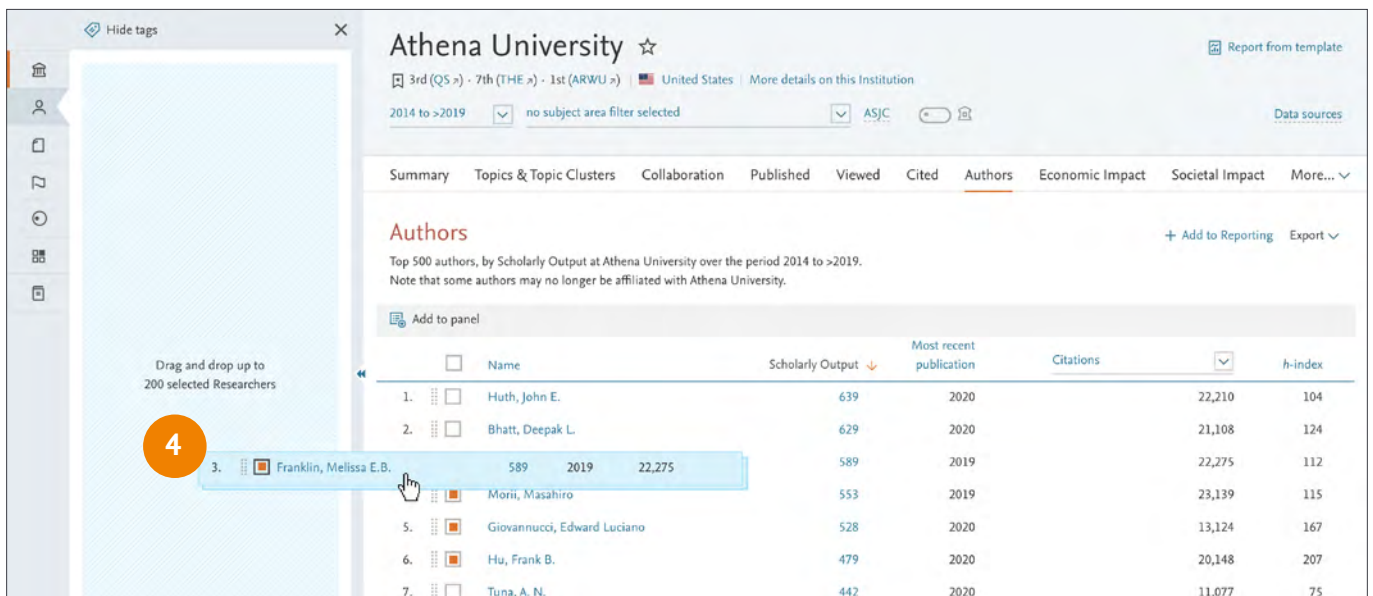
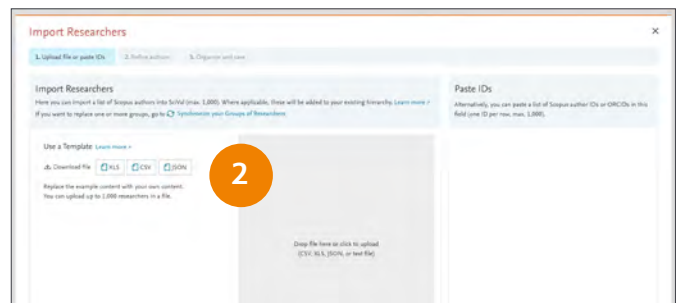
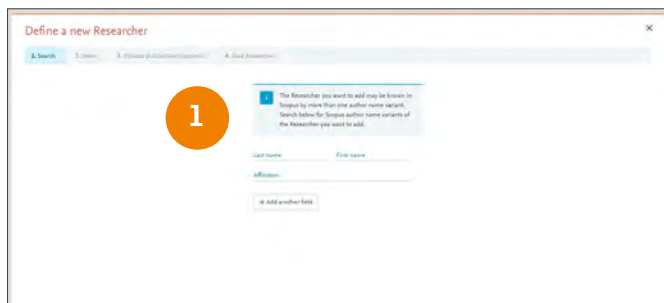
- Click the 'remove' (x) icon that appears when you hover over an entity in the panel
- Select 'Clean this section' to, for example, remove all Institutions from the 'Institutions' section
- Removing entities from the entity selection panel does not permanently delete them and they can be added back at any time

**Note:** Defining Research Areas, Researchers and Publication Sets is covered in the next sections



# 3.0 – Define Researchers and Groups

Define Researchers and Groups via intuitive workflows.



## 1. Define a new Researcher

- Click the 'Add' link at the bottom of the Researchers and Groups section
- Search by name to find an existing researcher or group, or 'Define a new Researcher'
- Follow the workflow to identify and add the researcher to SciVal

## 2. Import Researchers

- Click 'Add' link and then 'Import Researchers'
- Use the XLS, CSV or JSON templates, a text file, or paste a list of Scopus author IDs or ORCID IDs (up to 1000)
- Refine profiles where required
- Add profiles to a new Group or existing hierarchy

## 3. Define new Group of Researchers

- Drag and drop any of your self-defined Researchers into one or more Groups

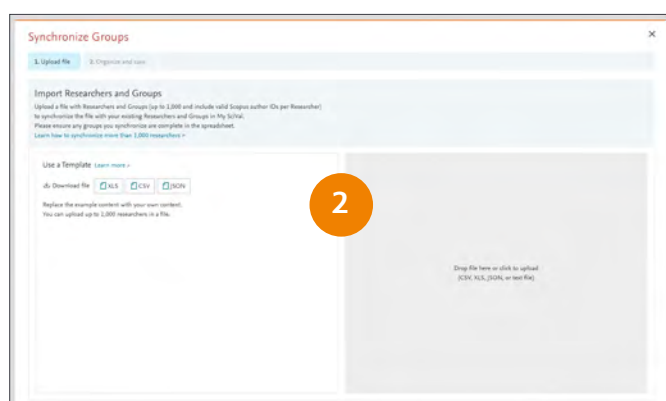
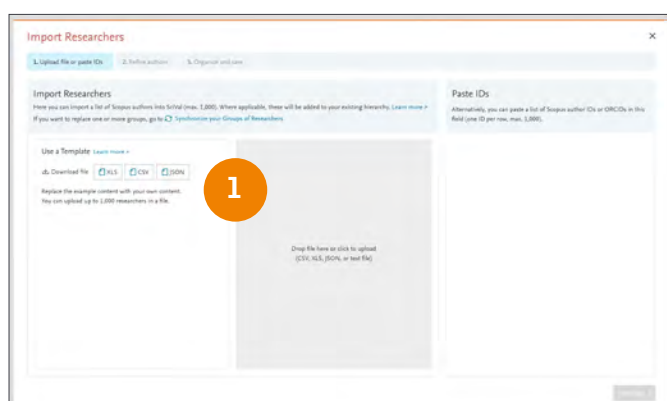
## 4. Drag and drop Researchers from the Authors tab within modules across to the entity selection panel to quickly add Researchers for further analyses





# 4.0 – Creating and importing departmental or institution wide hierarchies

In addition to the flexibility to analyse any researcher or group of researchers from any institution, you can also recreate your institution's complete hierarchy in a few steps.



## 1. Importing your institutional hierarchy, or part of it:

### a. Download and populate the Template:

- Click the Add link in the Researchers section of the entity selection panel or My SciVal and then 'Import Researchers'
- Download an example Template in XLS, CSV, or JSON format
- Complete the Template (up to 1000 Researchers at a time)

### b. Upload the completed Template:

- Drop the file into SciVal or click to upload
- Refine unmatched authors
- Check the hierarchy structure

### c. Save and finish

## 2. Modifying existing hierarchies and synchronizing:

### a. Export existing hierarchy:

- Go to My SciVal and select Researchers and Groups in the left-hand entity selection panel
- Select the hierarchy of interest and click Export
- Add or remove researchers as required to complete the new Template (up to 1000 Researchers)

### b. Synchronize the updated hierarchy:

- Click the 'Add New' link in My SciVal or the 'Add' link in the entity selection panel in each module
- Click 'Synchronize Groups' and upload your updated hierarchy file

### c. Verify changes and finish

# 5.0 – Define your own Research Areas

SciVal offers the flexibility to analyze a variety of pre-defined Research Areas or to self-define bespoke research areas, representing any field of interest to you.

1a

1b

1c

2

1. **Research Areas** can represent an area of strategic priority or any other field of interest using any of the below as the components:

**a. Search terms**

Define your research area based on publications that match a search query.

**b. Entities**

Select and combine any of the below

- Institutions (+ groups)
- Countries/Regions
- Subject Areas
- Scopus Sources

**c. Topics**

Select and combine Topics to create a new Research Area.

2. **Get an estimate of when your entities will be ready to use**

At the end of the creation process, you will be informed if the weekly metrics recalculation is running and so will delay the creation of the entity. Click the Data sources link to see when the next weekly recalculation will occur.

## Pre-defined entities

SciVal provides access to pre-defined profiles for thousands of institutions and their associated researchers, from 230 nations worldwide.

Furthermore, several groups of institutions and countries are made available such as EU28, US states, German Bundesländer and more.

Pre-defined Research Areas are also available based on the All Subject Journal Classification (ASJC) of Scopus.

**Note:** Research Areas with less than 5,000 publications are available to analyze immediately. However, Research Areas with greater than 5,000 publications can take around 6 hours to be computed and there is a 100,000 publication limit. You will be notified when a Research Area is available for use in SciVal.



1. Create definition 2. Refine definition 3. Save definition

Refine your definition by applying one or more filters

Subject areas

Scopus sources

Institutions

Countries/Regions

Organization types

Name	Publications
<input type="checkbox"/> Computer Science	25,272
<input type="checkbox"/> Engineering	9,331
<input type="checkbox"/> Mathematics	7,587
<input type="checkbox"/> Physics and Astronomy	2,472
<input type="checkbox"/> Social Sciences	2,121
<input type="checkbox"/> Materials Science	2,008
<input type="checkbox"/> Decision Sciences	1,802
<input type="checkbox"/> Medicine	1,256
<input type="checkbox"/> Arts and Humanities	1,246
<input type="checkbox"/> Neuroscience	1,047
<input type="checkbox"/> Earth and Planetary Sciences	825
<input type="checkbox"/> Energy	470
<input type="checkbox"/> Business, Management and Accounting	453
<input type="checkbox"/> Biochemistry, Genetics and Molecular Biology	451
<input type="checkbox"/> Agricultural and Biological Sciences	357
<input type="checkbox"/> Chemical Engineering	340
<input type="checkbox"/> Environmental Science	285

**Definition of your Research Area:**

Convolution; Neural networks; Convolutional network (T.4338) OR  Neural networks; As... (T.123)

Show all

**Applied filters:**

Limit to publications in the past 5 years X

**Total matching publications (2014-present)** 30,564

Limit to publications in the past 5 years

3

Previous step Next step

Define a new Research Area View quick guide X

1. Create definition 2. Refine definition 3. Save definition

4 Save your Research Area as

Neural Networks - April 2020 28 of 300

Add tags (optional)

This Research Area will be updated approximately every week with new publications matching the definition.

View Research Area Summary

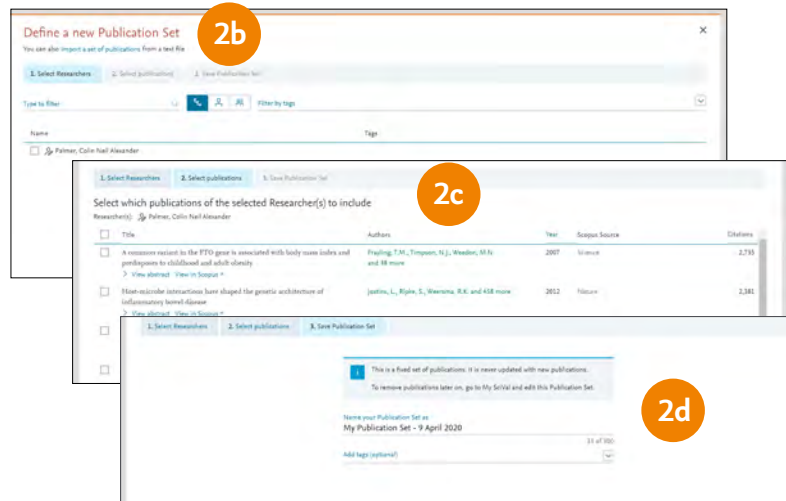
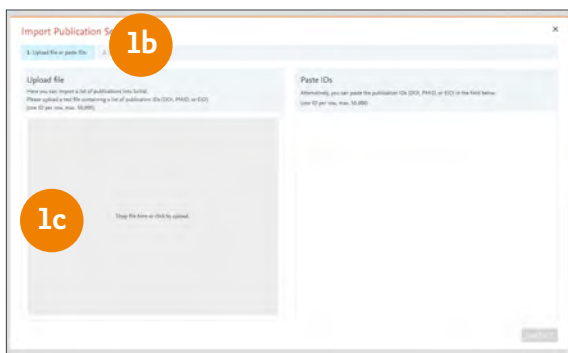
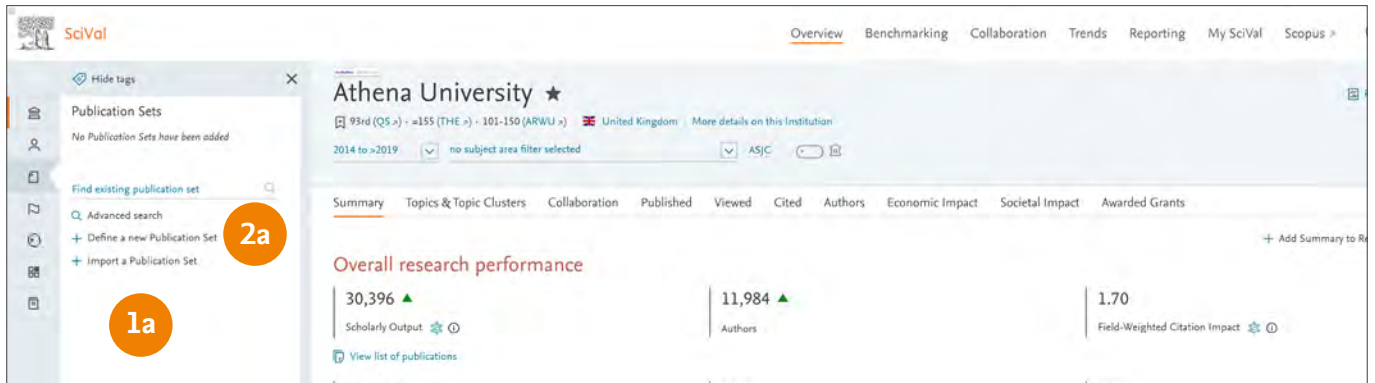
Previous step Save and define another Research Area Save and finish

3. Refine the Research Area by limiting to publications in the past 5 years, or by limiting or excluding specific Subject areas, Scopus Sources, Institutions, Countries/Regions or Organization types.
4. Name your new Research Area, add relevant tags if desired, and save for analysis throughout SciVal.

The Research Areas can then be analyzed across the platform.

# 6.0 – Defining Publication Sets

Create bespoke Publication Sets representing strategic priority areas or for scenario modeling.



## 1. Importing Publication Sets:

### a. Import Publication Sets

- Click the Add link in the Publication Set section and then 'Import a Publication Set'

### b. Select ID format for your Publications of interest from one of the following:

- Scopus EID**  
Unique identifier assigned to all Scopus records
- PubMed ID**  
Unique identifier assigned to PubMed records
- DOI (Digital Object Identifier)**  
Persistent identifier managed by the International DOI Foundation for use on digital networks

### c. Create and upload a text file (ANSI format) containing up to 50,000 publication IDs, one per line, and follow the workflow to upload the file

### d. Confirm publications and save

## 2. Define a Publication Set from a subset of any Researcher's publications:

### a. Create a new Publication Set

- Click the Add link in the Publication Set section and then 'Import a Publication Set'

**Note:** You need to have pre- or self-defined researchers added to your entity selection panel to activate this menu

### b. Select Researcher(s) of interest

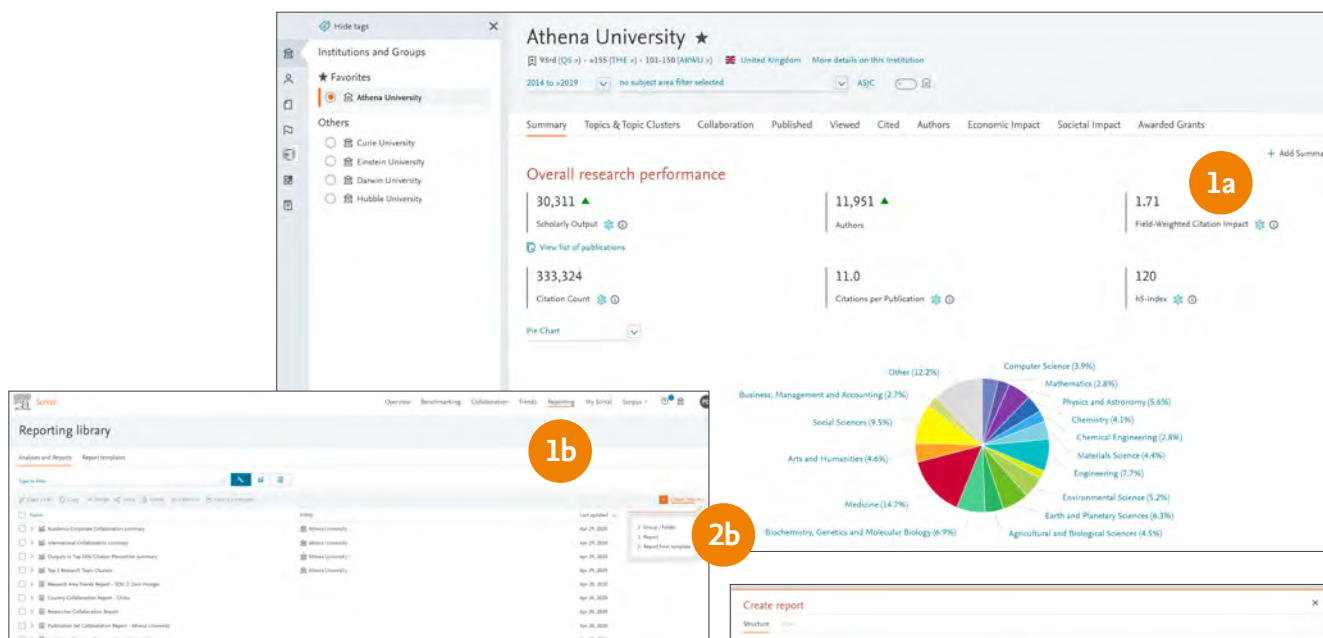
### c. Select the required publications

### d. Save Publication Set after adding a name and tags, if required



# 7.0 – Reporting in SciVal

Create rich reports specifically tailored to support your institution's research strategy. Speed up repetitive tasks by selecting from one of the SciVal-created or customer-endorsed report templates or by creating your own report template.



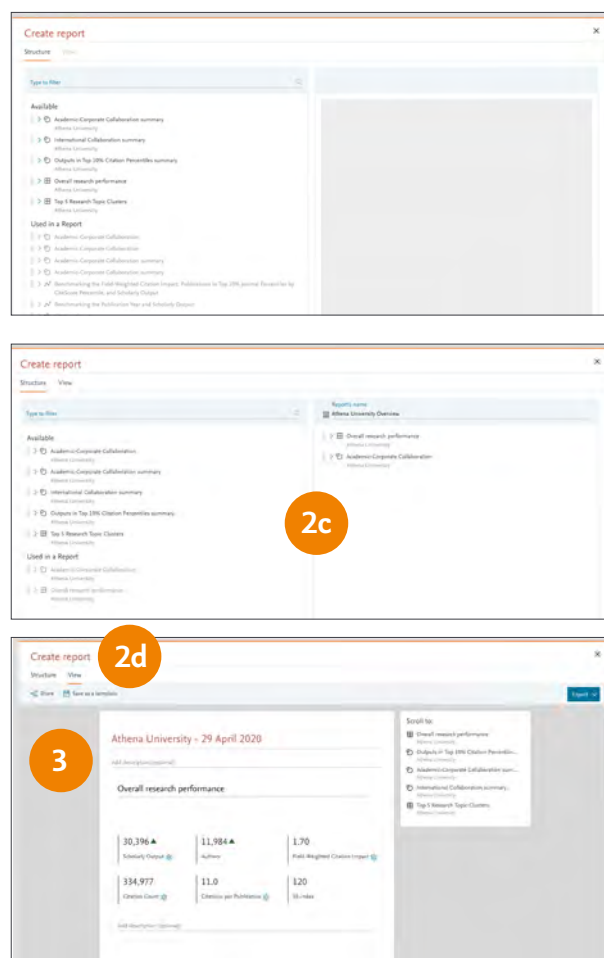
## 1. Saving and using analyses

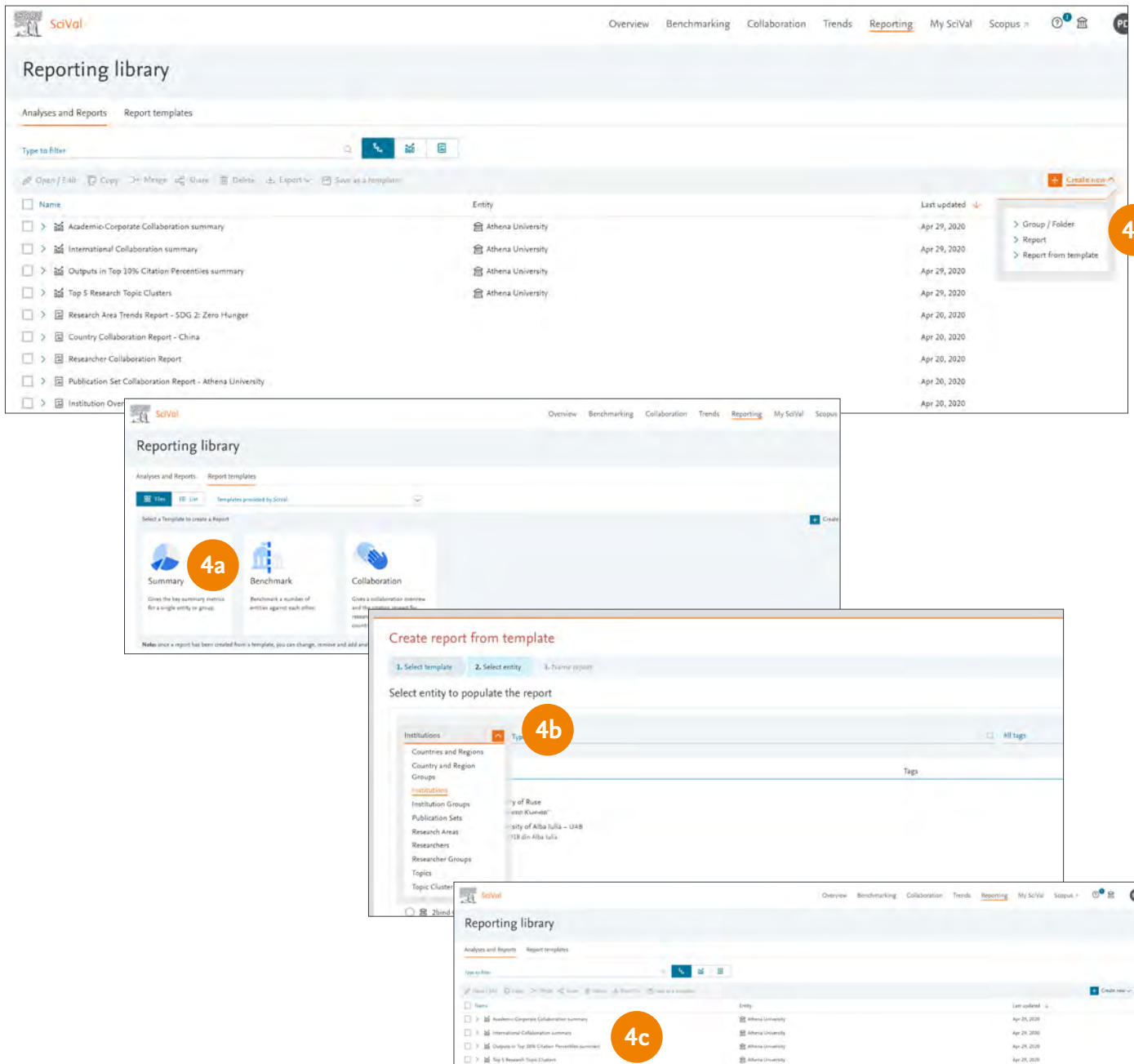
- a. Select the entities, metrics and options of interest and click 'Add to Reporting'
- b. Go to 'Reporting' in the global navigation bar at the top of the screen to add analyses to an existing Report or create a new one

## 2. Creating, Sharing and Exporting a Report

- a. Go to 'Reporting' in the global navigation bar at the top of the screen
- b. Click 'Create new' and select 'Report'
- c. Drag and drop the analyses you would like to use to the right-hand side and reorder if required
- d. Click the 'View' tab to see the Report layout and add descriptions as needed

## 3. Save as Template, Share or Export your Report as required





#### 4. Using report templates

- a. SciVal-created report templates, including customer-endorsed templates
  - Go to Reporting and click 'Create new' and then 'Report from Template'
  - Select the template you would like to use from 'Provided by SciVal', 'Provided by Customers', or 'Defined by You'
- b. Select the entity or entities you would like to analyse
  - Name and save your Report, which will now be a standard Report that you can change, remove, add analyses to or share

#### c. Creating your own reporting template

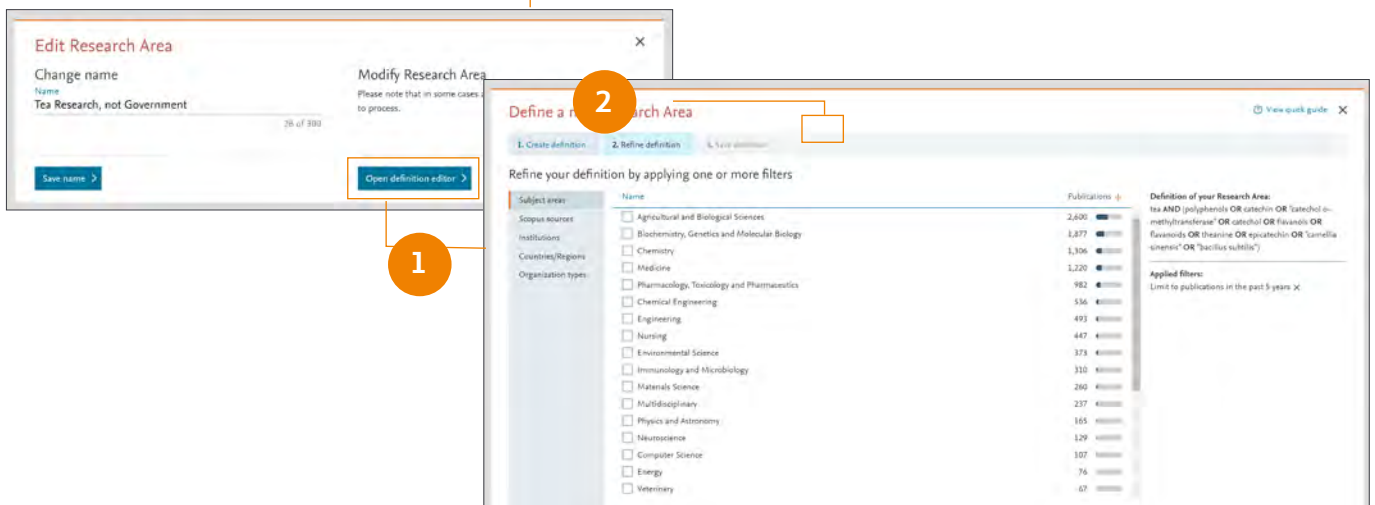
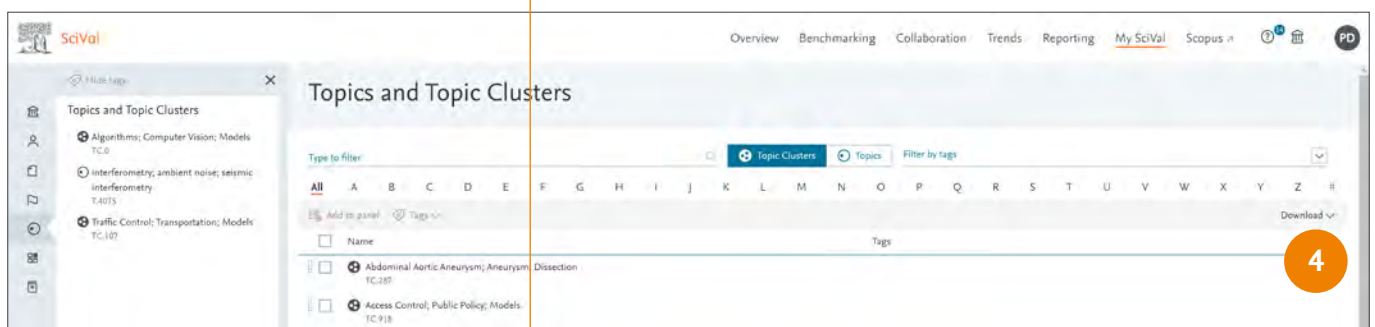
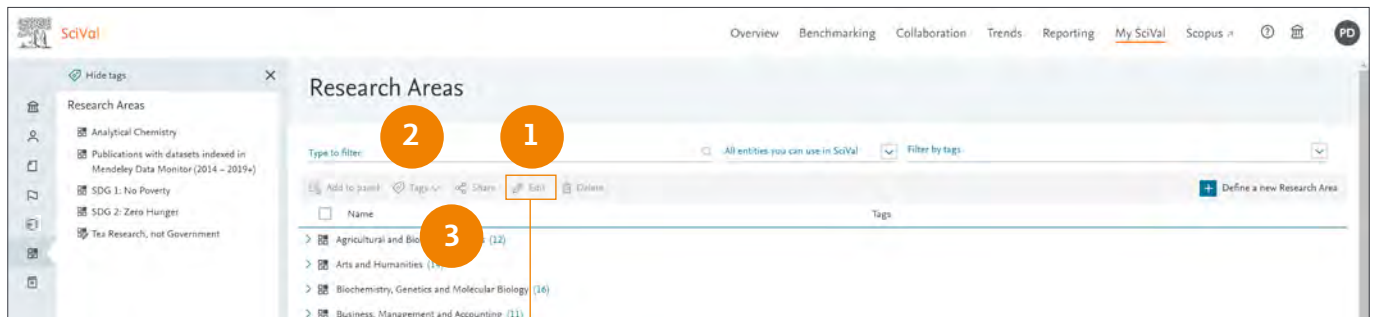
- Open the Report you would like to save as a Template and modify as required
- Click the 'Save as Template' link
- Name and save the Template and it is now available with the other Report Templates in the tab 'Defined by you'

**Note:** A template with analyses from Benchmarking, plus one other module requires an additional step where a 'core' entity is selected.



# 8.0 – My SciVal

In addition to managing entities within the entity selection panel on the left-hand side of each module, My SciVal provides additional functions.



Entities can be removed from the entity selection panel on the left-hand side of each module but will remain in My SciVal. They can then be added back to the entity selection panel from within My SciVal at a later date. Deleting an entity from My SciVal removes the entity from SciVal completely.

1. **Edit Research Areas** by adding more search terms or applying additional filters
2. **Add tags** representing departments or projects to manage entities with ease. See all tags in your Tag Manager, untag entities, merge or delete tags.
3. **Share** entities with other SciVal users
4. **Download** the information about all Topics & Topic Clusters in a single spreadsheet



For more information about SciVal, visit:  
[elsevier.com/scival](https://elsevier.com/scival)

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