



ELSEVIER

SciVal in a nutshell

For research managers

Belgrade, 24th May 2019.



Preamble

SciVal's key differentiators

1. Incredibly flexible and easy to navigate
1. Based on most comprehensive data source in the world, Scopus
2. Easy to use >> perform simple analyses or take several metrics to create uniquely tailored analytical reports
3. Analysis and scenario modeling for any researcher or groups in the world, based on full publication history (thanks to our Scopus Author Profiles!)

Objectives

Help you gain an overview of SciVal and a primer on using it practically so you can get started after the session.

Topics covered will include:

1. What are the basics?
2. How can SciVal help me?
3. What is the underlying dataset?
4. Considerations around the data and metrics
5. Location and content of the help files

Accessing SciVal at www.scival.com

Login

SciVal is a ready-to-use solution with unparalleled power and flexibility, which enables you to navigate the world of research and devise an optimal plan to drive and analyze your performance.

(*=required fields)

Login using your Elsevier credentials

If not, [Register Now](#)

Username: *

Password: *

Remember me

[Login](#) [Cancel](#)

[Forgotten your username or password?](#)

New to SciVal? [Find out](#) what the new generation of SciVal can do for you.

Configure, visualize and export information according to your personal needs through SciVal's integrated modular platform:



Overview

Get a high-level overview of the research performance of your Institution, other Institutions, Countries and Groups of Researchers.



Benchmarking

Compare and benchmark your Institution to other Institutions, Researchers and Groups of Researchers using a variety of metrics.



Collaboration

Explore the collaboration network of both your Institution and other Institutions.



Trends

Get the current scientific trends to determine a new research strategy, find collaboration opportunities and rising stars.



If you haven't previously registered for Scopus or ScienceDirect then please go to **Register Now**. Use VPN off-campus or ask Shelly for a Remote Access link

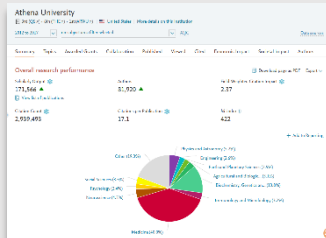
SciVal in a nutshell

SciVal offers quick, easy access to the research performance of over 10,000 research institutions and 230 regions and countries



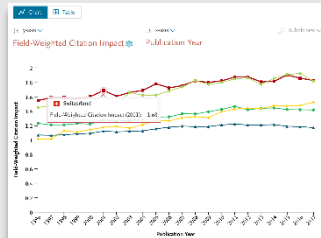
**Visualize
research
performance**

Ready-made-at a glance snapshots of any selected entity



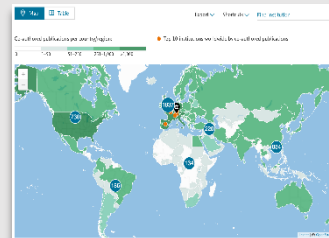
**Benchmark
your progress**

Flexibility to create and compare any research groups



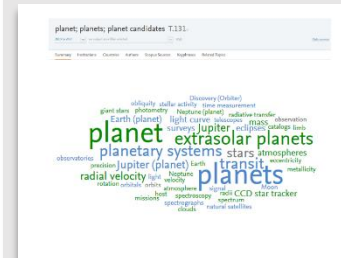
**Develop
collaborative
partnerships**

Identify and analyze existing and potential collaboration opportunities



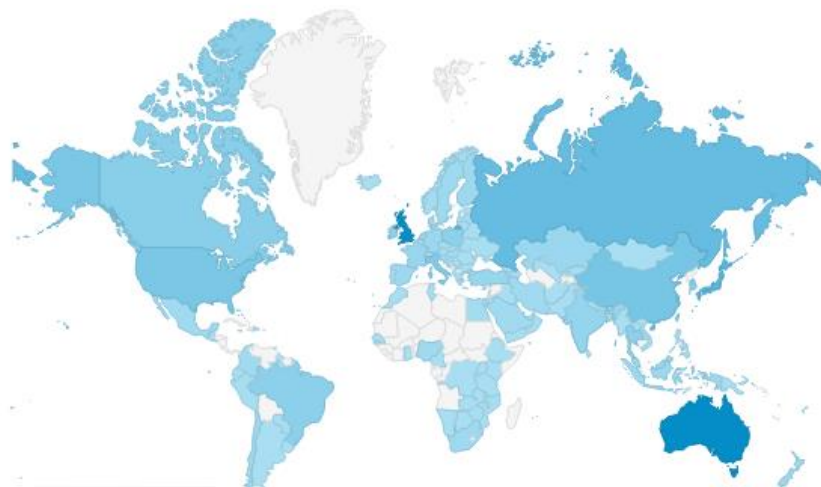
**Analyze
research
trends**

Analyze research trends to discover the top performers and rising stars



SciVal today

- **Measuring research performance of 9,900 academic, corporate and governmental institutions**
- More than **600 customers**, across **80 countries**, since its **launch in 2014**. Predominantly academic institutions.
- Very strong presence in **UK, Australia, Japan, China and Russia**
- **Corporate customers** include: Unilever, Siemens, Boeing
- Several **funding organizations** and **national government bodies**



Short release cycles – iterative design

Previous 2018 releases

- **Topic Prominence in Science:** Representative publications and Topics for Researcher
- Remove hyper-authored papers & view only the “real” collaborations
- **Reporting enhancements:** one library instead of two for easier navigation

Pascal
12 June

- **Hierarchical structures** from Pure into SciVal
- **Reporting enhancements** – custom naming and renaming of analyses
- h5-metric update allows year-on-year comparisons
- SciVal API supports predefined groups of researchers and countries

Qushji
10 July

- **Topic Prominence in Science:** Key contributors + support for groups of institutions
- **Reporting enhancements** – instant report from Overview summary page + Trends

Ride
28 August

- **Topic Prominence in Science:** Related Topics
- Additional subject classifications (incl. THE, QS, KAKEN)
- See only the publications from your researchers when published at your 'home' institution.

We are here

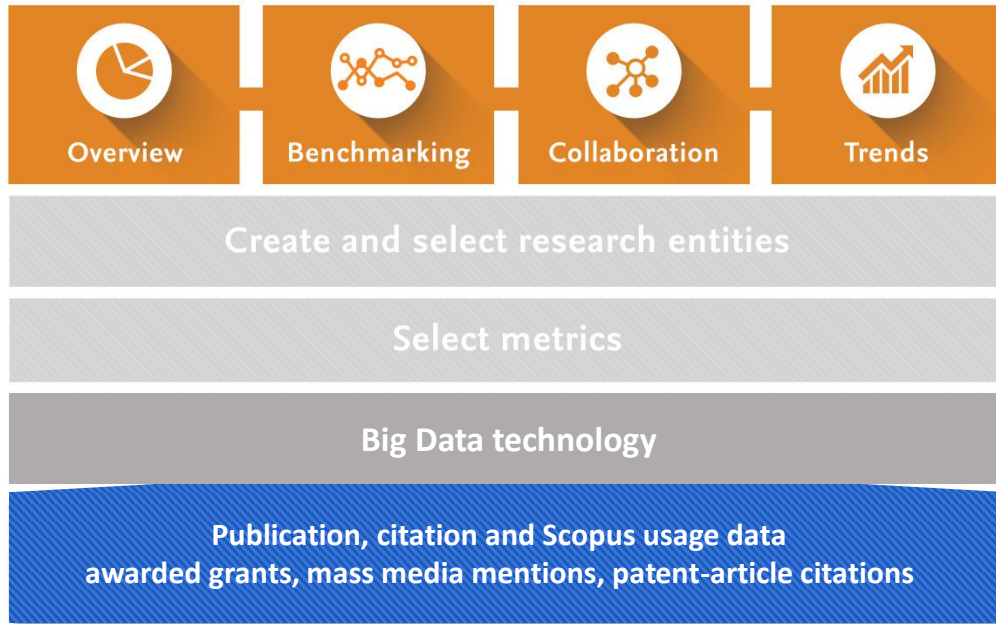
Sagan
18 September

- **Reporting enhancements:** Reporting in Collaboration module
- Diacritic support. To help you find an institution faster
- Enhanced import researcher flow. Manage your **hierarchy** in SciVal using a master spreadsheet. .

Roadmap 2019

Theme	Q1	Q2	Q3	Q4
Move to Spark	HPCC to Spark Migration - Phase 1 Infrastructure maintenance and improvements		HPCC to Spark Migration - Phase 2	
Enhanced functionality		Implementation of ID+	Topics for Publication Sets, who has cited my Researchers / University	
Support researchers in SciVal + new metrics	Improve researcher onboarding experience	Metrics wizard: Responsible use of metrics	Introducing researcher/faculty-level use cases in Collaboration module	SciVal Metrics Exchange pilot , PlumX metrics
Optimizing our core platform	Richer visualization options across SciVal and in Reporting	First and corresponding author as options in Scholarly Output	Advance flow to create Research Areas (better search, quicker iteration)	University Systems as new institutional entity type

The layers of SciVal



The foundation of SciVal

Scopus

Publication,
Citation, usage data

newsflo
bespoke media monitoring



Publication, citation and Scopus usage data, mass media mentions, patent-article citations

Benefits for a broad range of users

SciVal supports the needs of a broad range of institutional users by providing ready-made, at-a-glance snapshots for flexible, institution-specific insight



Vice chancellors
of research

- 360 degree Performance Overview to inform strategic planning
- Identify institution's strengths and short-comings



Research
administrators

- Create management-level reports
- Accelerate institutional and cross-institutional collaboration
- Support and win large grants



Department
heads

- Evaluate researcher and team performance for recruitment and retention decisions
- Model-test scenarios by creating virtual teams



Researchers

- Raise visibility and highlight achievements
- Expand networks
- Locate collaborators and mentors

What are the questions addressed using SciVal?

“How can we demonstrate excellence in a way that best shows our unique strengths to secure funding and attract students?”



“I want to explore the various scenarios I’m considering to set up a centre of excellence. How can the data provide me with insights?”



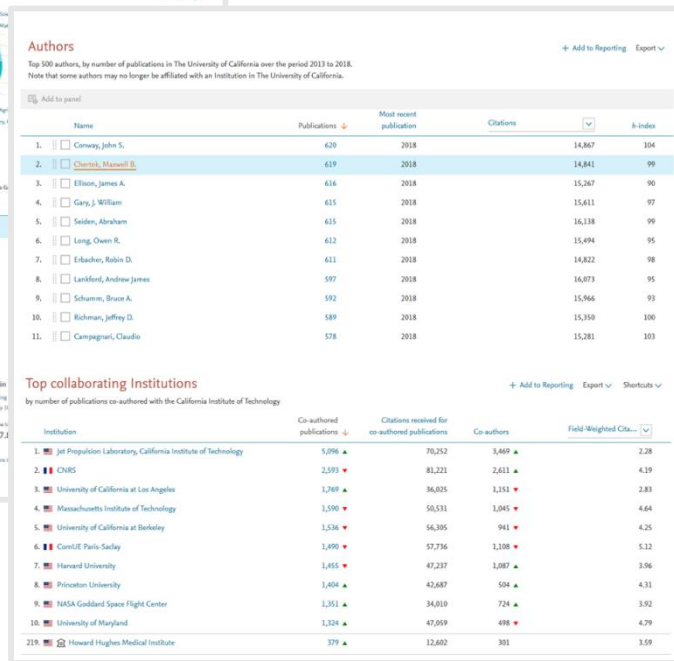
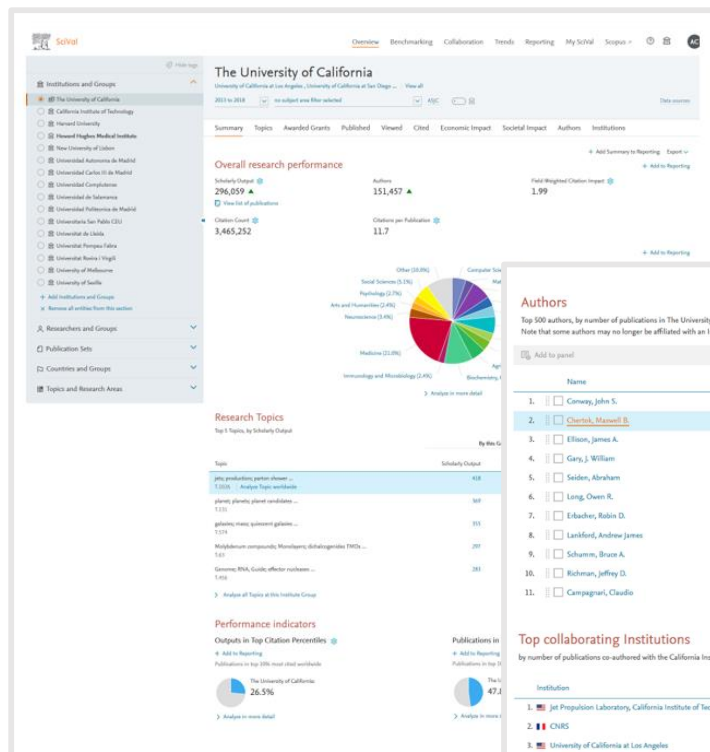
“My VC is going to China; who do our academics collaborate with there and how can we expand?”



“How can I see who’s excelling in a specific subject compared to my researchers, for potential collaboration opportunities?”

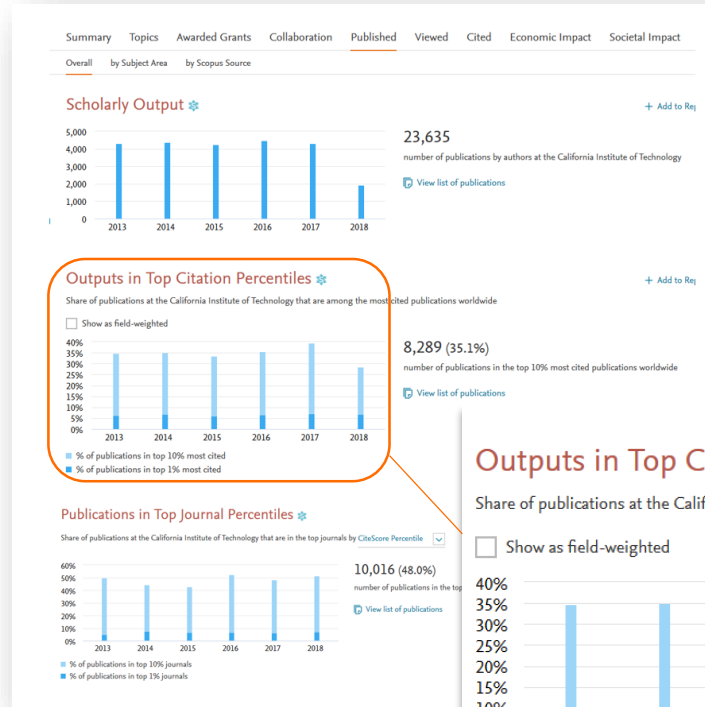


“How can we demonstrate excellence in a way that best shows our unique strengths to secure funding and attract students?”

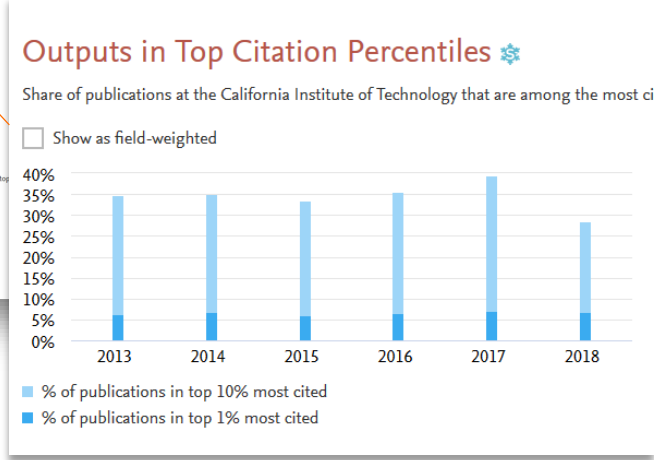


View the disciplinary focus of your institutions and your top researchers

Look through different metrics to identify ones that demonstrates your institution's research excellence



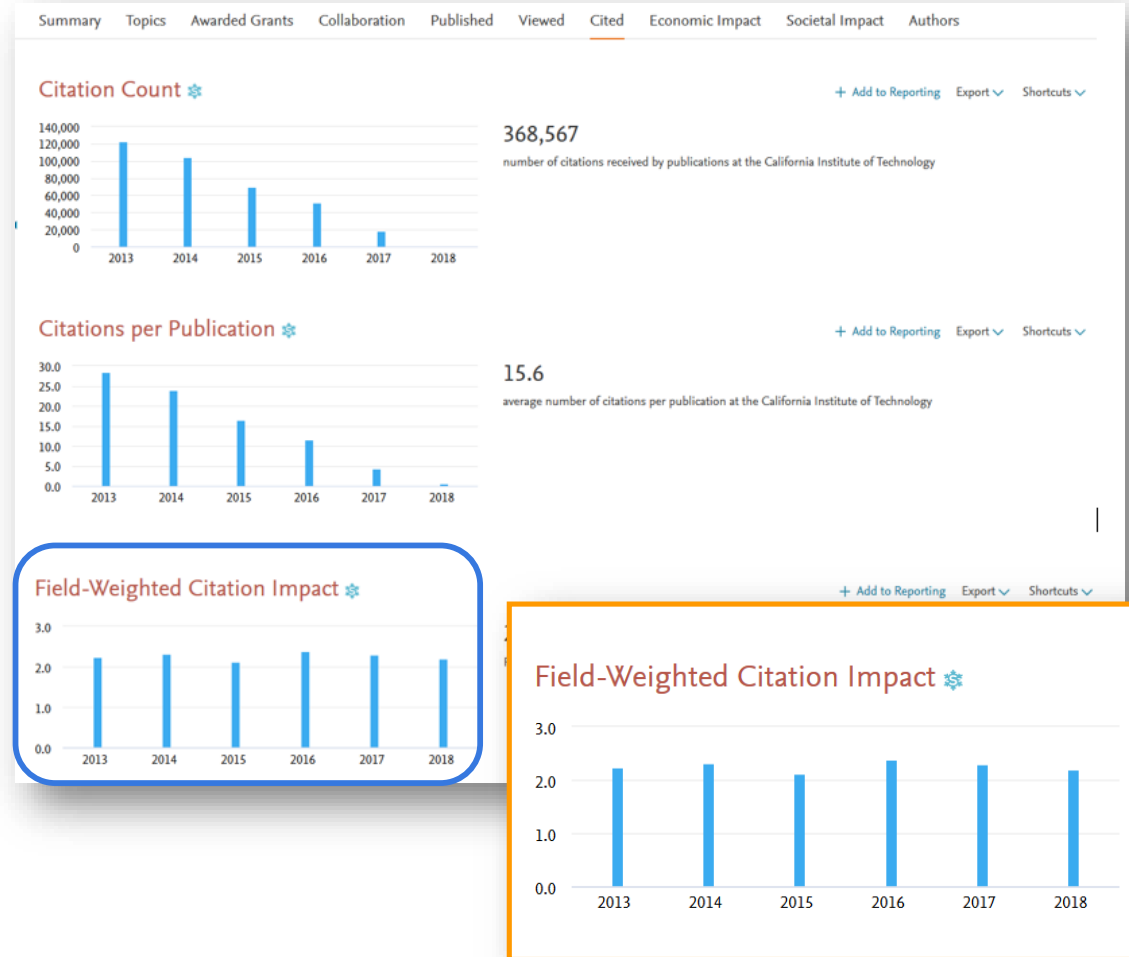
2017
7.1% in top 1% most cited
39.6% in top 10% most cited



See how many of your publications fall into the top 1% and 10% of the most cited articles in the world

Look through different metrics to identify ones that demonstrates your institution's research excellence

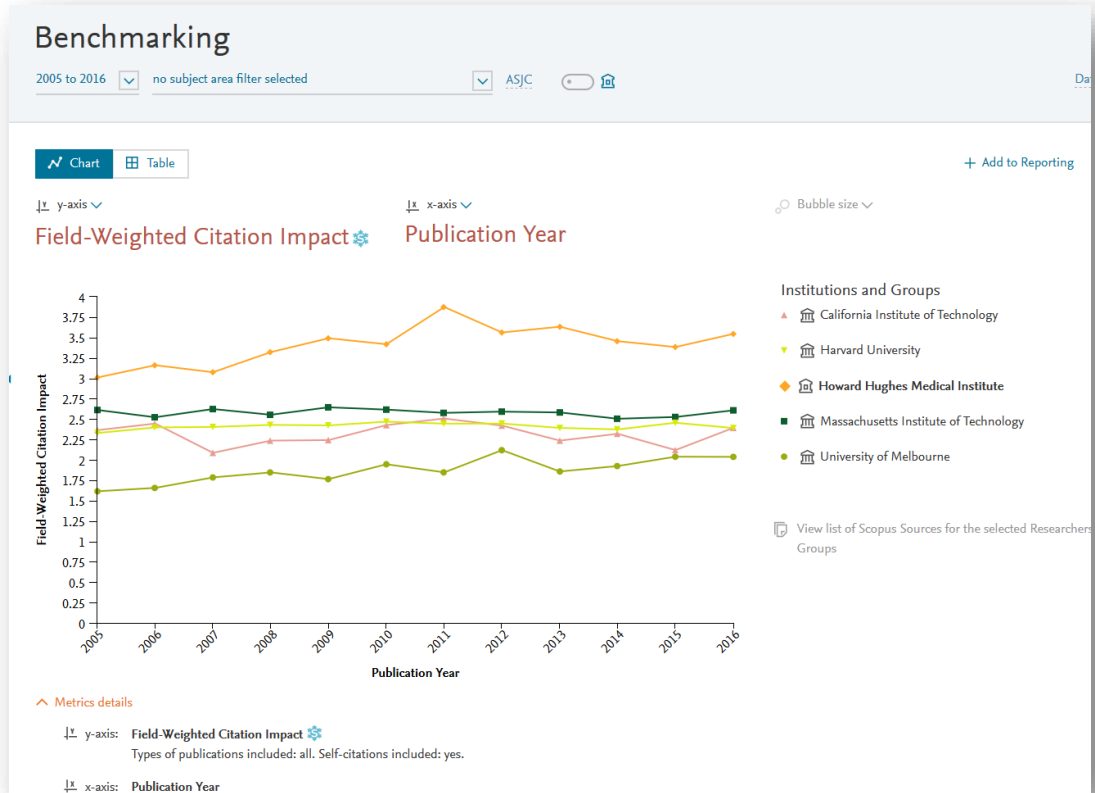
View Field-Weighted Citation Impact that normalizes citation behavior for differences in size, field and publication-type



"I want to explore the various scenarios I'm considering to set up a centre of excellence. How can the data provide me with insights?"



Test scenario by creating virtual teams and compare using multiple metrics



“My VC is going to China; who do our academics collaborate with there and how can we expand?”



Collaboration by the Massachusetts Institute of Technology

United States | More details on this Institution

2013 to 2017 | no subject area filter selected

ASJC

Data

Current collaboration | Potential collaboration

Institutions collaborating with the Massachusetts Institute of Technology

Worldwide

All sectors

All author numbers

4,242 collaborating institutions

33,545 co-authored publications

Map | Table

Export | Shortcuts | Find Institution

Co-authored publications per country/region:

Top 10 institutions worldwide by co-authored publications

0 1-50 51-250 251-1,000 >1,000



Drill into the map to identify your collaboration partners in China

Identify existing and potential collaboration partners

Collaboration by the Massachusetts Institute of Technology

United States | [More details on this Institution](#)

2015 to 2017 | no subject area filter selected

ASJC

[Data sources](#)

[Current collaboration](#) | [Potential collaboration](#)

Institutions collaborating with the Massachusetts Institute of Technology

Asia Pacific | China | All authors | All sectors | reset filter

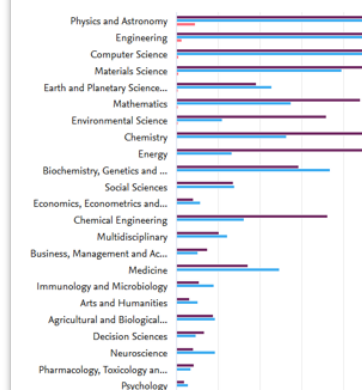
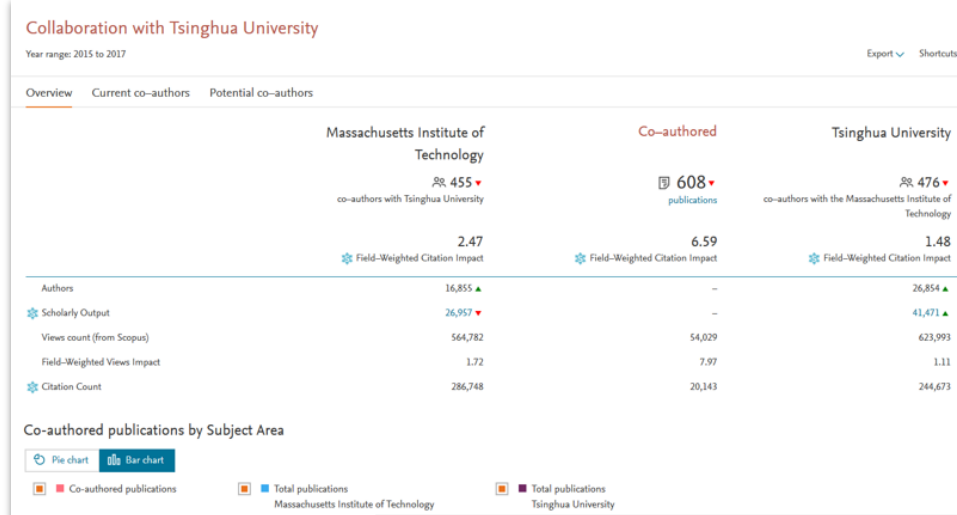
290 collaborating institutions | 2,261 co-authored publications

Map | Table

[Export](#) | [Shortcuts](#) | [Find institution](#)

Institution	Co-authored publications ↓	Co-authors at the Massachusetts Institute of Technology	Co-authors at the other institution	Field-Weigh... ↓	Field-Weigh... ↓
Tsinghua University	608 ▼	455 ▼	476 ▼	6.59	7.97
Chinese Academy of Sciences	553 ▼	519 ▲	815 ▲	4.47	7.23
CAS - Institute of High Energy Physics	489 ▼	236 ▲	323 ▲	4.12	13.70
Peking University	421 ▲	251 ▲	241 ▲	4.37	12.59
Shanghai Jiao Tong University	268 ▼	249 ▼	227 ▼	5.60	9.98
University of Science and Technology of China	234 ▼	186 ▼	203 ▼	5.55	10.77
Shandong University	206 ▼	138 ▼	161 ▼	6.02	11.89
Central China Normal University	198	49 ▼	32 ▼	4.60	8.72
Nanjing University	193 ▼	151 ▼	136 ▼	6.52	13.04

Assess the activity level and identify researchers



Collaboration with Tsinghua University

Year range: 2015 to 2017

Export Shortcuts

Overview Current co-authors Potential co-authors

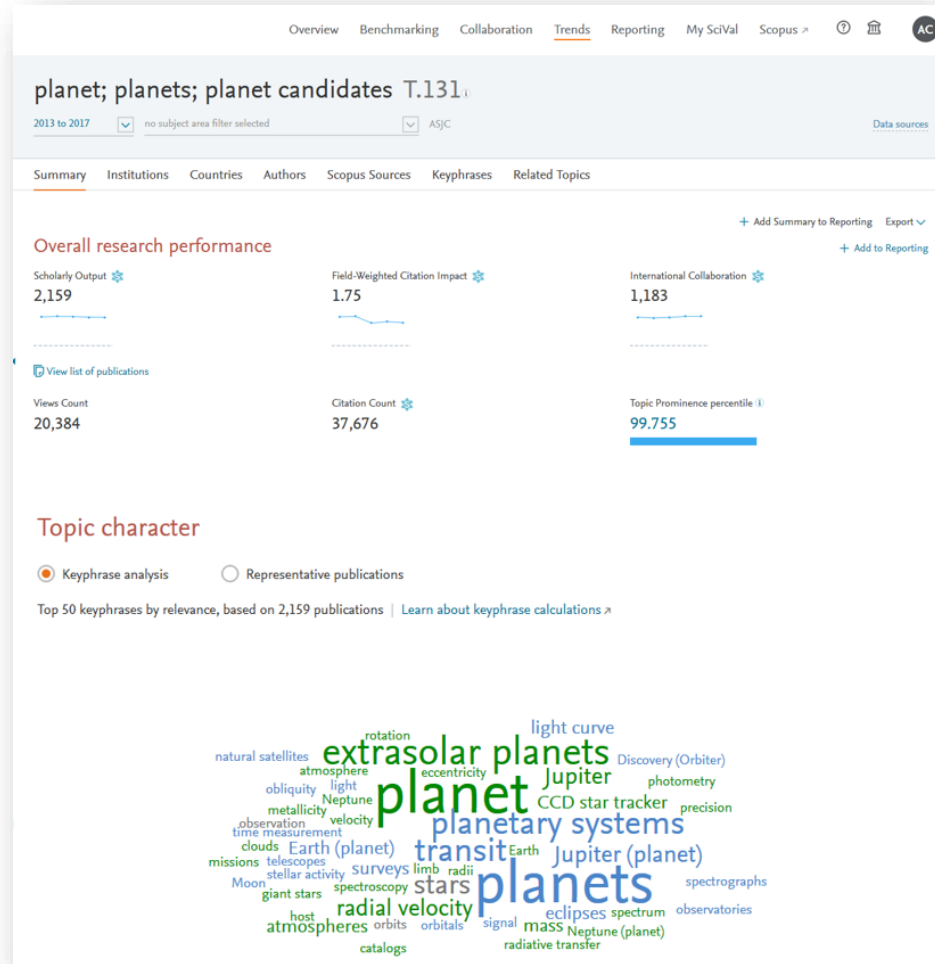
Add to panel

Massachusetts Institute of Technology			Tsinghua University		
Co-authors with Tsinghua University			Co-authors with the Massachusetts Institute of Technology		
Author	Co-authored publications	Citations	Author	Co-authored publications	Citations
> Iken, Phillip H.	180	2,745	> Guo, Y. S.	179	2,595
> Williams, Michael P.	150	2,081	> Yang, Zhenwei	178	2,595
> Taylor, Frank E.	129	3,946	> Zhang, Liming M.	170	2,214
> Boettcher, Tom	82	593	> An, Liqun	140	2,416
> Aggarwal, Nany	62	7,846	> Liu, Xiao Hai	139	1,784
> Barsotti, Lisa	62	7,846	> Chen, X.	132	4,283
> Donover, Fred	62	7,846	> Zhang, Liang	98	2,152
> Essick, Reed C.	62	7,846	> Zhang, Yanai	95	1,957
> Evans, Matthew A.	62	7,846	> Zhu, Xiangfei	83	634
> Fritschel, Peter K.	62	7,846	> Jing, F. F.	72	1,819
> Gras, Sławomir	62	7,846	> Jiang, F.	66	432
> Katsavounidis, Erotokritos	62	7,846	> Guo, Xiangyu	60	7,696
> MacInnis, Myron	62	7,846	> Cao, J.	60	7,624
> Mason, Kun	62	7,846	> Sun, Yilong	64	7,771

“How can I see who’s excelling in a specific subject compared to my researchers, for potential collaboration opportunities?”

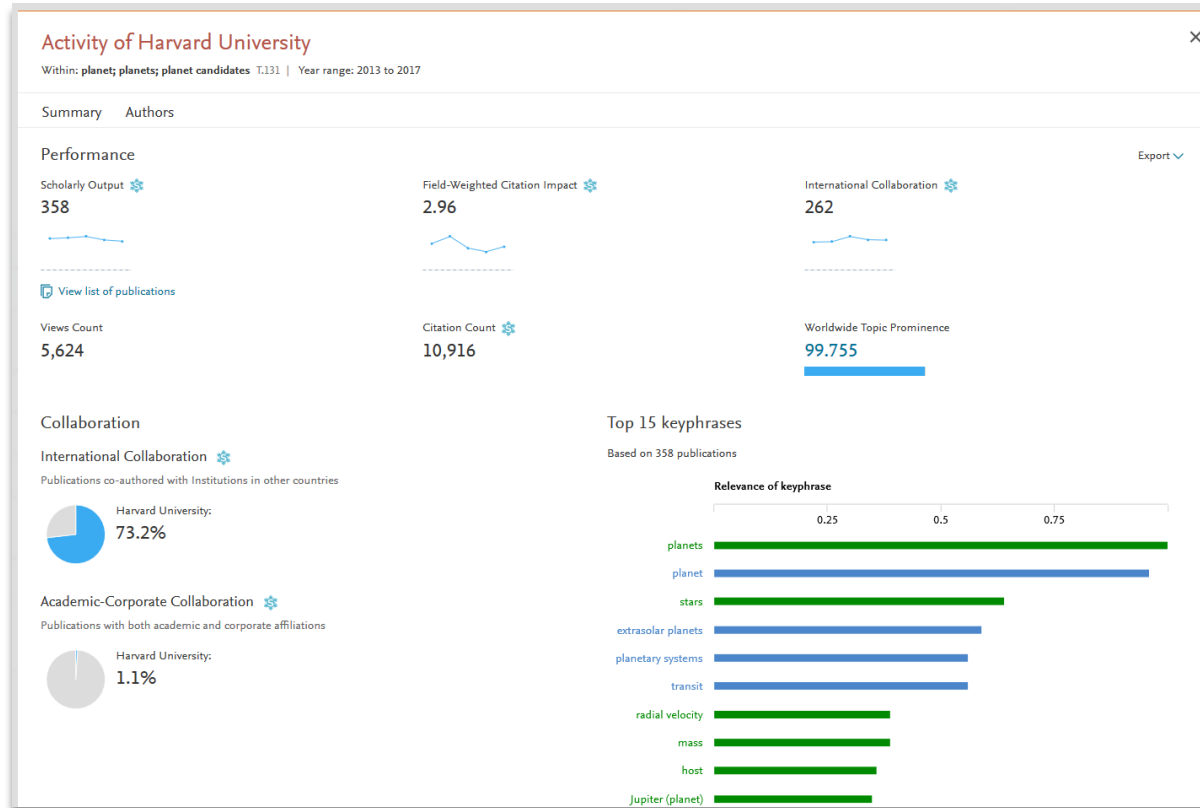


Choose or create your own Research Area in SciVal



Analyze all or a specific part of the Research Area

Choose a specific key phrase within the Research Area, then view the performance of the top institutions, countries, authors and journals and compare them to your institution for potential synergies



SciVal. Solution to your strategic planning challenges

Gain immediate access to view and analyze the world's research to:

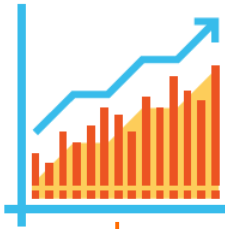
- View the ready-made, at-a-glance snapshot of your research performance or of any team or institution around the world
- Benchmark your team's or institution's performance against any set of peers.
- Model test scenarios by creating virtual teams and newly emerging research areas.
- Evaluate existing and identify potential collaborative partnerships, locally or globally
- Track and monitor top performers and rising stars for any research topic of interest.



Other useful resources



Research metrics can be used to...



Analyze the strengths of research at the institution



Determine where research is a good potential investment



Demonstrate Return on Investment of research money



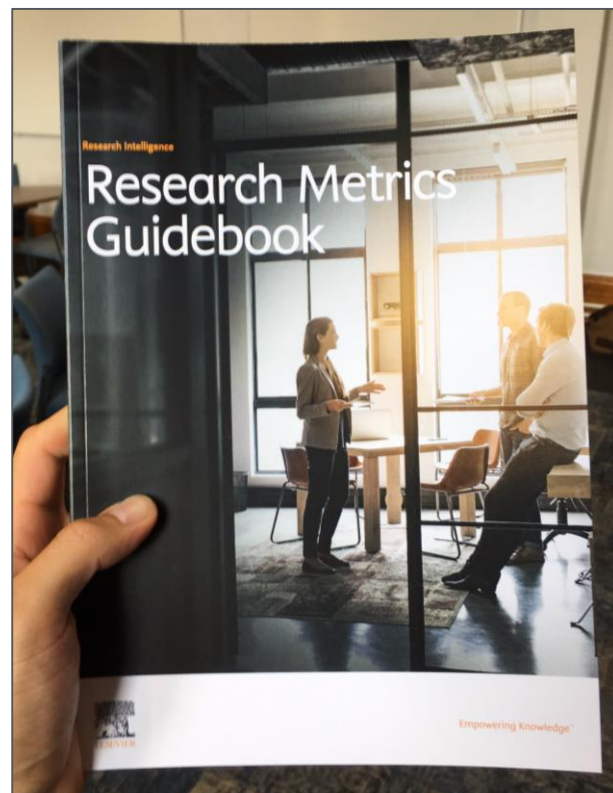
Identify rising stars amongst the early career researchers



Tell a better narrative about everything that is happening with research

Research Metrics Guidebook

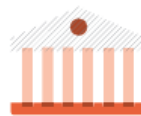
- **Topics** – Expand and enhance
- **Organisational hierarchies in SciVal** – Easy method to create and maintain
- **Reporting** – Simplify, enhance and expand the functionality
- **Improve our metrics support** – Relaunched support hub, refreshed Metrics Guidebook, in-product guidance, reporting templates, Metrics wizard
- **Additional** – REF year range, new subject classifications, home institution filter and hyper-authored papers, Collaboration module overhaul



Research Metrics Guidebook

This comprehensive metrics guidebook is intended to be a straightforward, practical companion for you to find the right metrics to meet your objectives.

- **Understanding metrics**
 - Scopus as data source
- **Selection of appropriate metrics**
 - What affects their values, besides performance?
- **For each metric**
 - Situations in which they are useful
 - When to take care and how to address short-comings
 - Worked examples



4.0 SciVal and research metrics

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Two Golden Rules for using research metrics

Always use both qualitative and quantitative input into your decisions

Benefit from the strengths of both approaches. Don't replace one with the other

Combining both approaches = **closer to the whole story**

Valuable intelligence comes when these approaches **show different messages**

Always use more than one research metric as the quantitative input

One metric's strengths can **complement** the weaknesses of others

There are many different ways of being excellent

Using multiple metrics drives desirable changes in behaviour (harder to game)

How to choose a metric

There are **6 factors**, which can affect the value of a metric:

- Size
- Publication-type
- Manipulation
- Discipline
- Database coverage
- Time

	Size-normalized?	Field-normalized?	Publication-type normalized?	Resistant to database coverage?	Difficult to manipulate?	Time-independent?
Academic-Corporate Collaboration	Diagonal lines				Dark purple	Dark purple
Academic-Corporate Collaboration Impact	Dark purple					
Awards Volume					Dark purple	Dark purple
Citation Count						
Citations Per Publication	Dark purple					
Cited Publications	Diagonal lines					
Citing-Patents Count					Dark purple	
Collaboration	Diagonal lines				Dark purple	Dark purple
Collaboration Impact	Dark purple					
Field-Weighted Citation Impact	Dark purple	Dark purple	Dark purple	Dark purple	Dark purple	
Field-Weighted Mass Media	Dark purple	Dark purple	Dark purple	Dark purple	Dark purple	Dark purple
Field-Weighted Views Impact	Dark purple	Dark purple	Dark purple	Dark purple	Dark purple	Dark purple
<i>h</i> -indices						
Mass Media					Dark purple	Dark purple
Media Exposure	Dark purple					Dark purple
Number of Citing Countries					Dark purple	

A basket of >30 sets of metrics at your disposal

Productivity metrics

- ⚙ Scholarly Output
- ⚙ Outputs in Top Percentiles
- ⚙ Publications in Top Journal Percentiles

Citation Impact metrics

- ⚙ Citation Count
- ⚙ Citations per Publication
- ⚙ Cited Publications
- ⚙ Number of Citing Countries
- ⚙ *h*-indices (*h*, *g*, *m*)
- ⚙ Field-Weighted Citation Impact
- Citing-Patent Count
- Patent-Cited Scholarly Output
- Patent-Citations Count
- Patent-Citations per Scholarly Output

Collaboration metrics

- ⚙ Collaboration (geographical)
- ⚙ Collaboration Impact (geographical)
- ⚙ Academic-Corporate Collaboration
- ⚙ Academic-Corporate Collaboration Impact

Disciplinary metrics

- Journal count
- Journal category count

Usage metrics (Trends module)

- Views Count
- Views per Publication
- Field-Weighted Views Impact

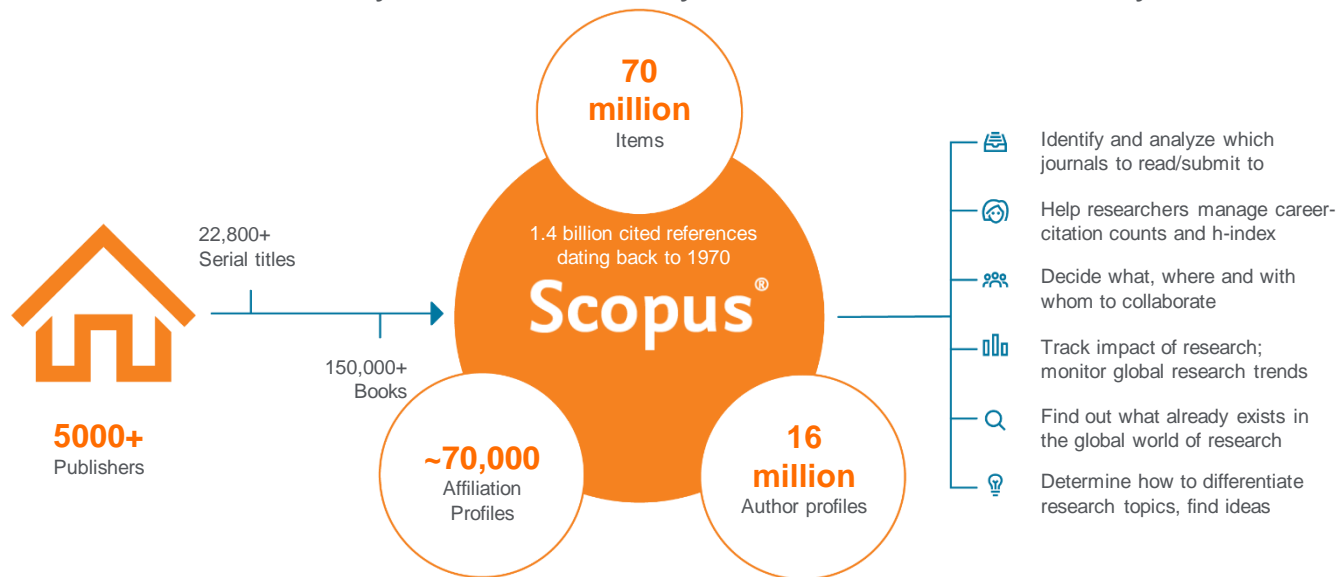
Societal Impact Metrics

- Mass Media
- Media Exposure



What is Scopus?

Scopus is the largest abstract and citation database of peer-reviewed literature, and features smart tools that allow you to track, analyze and visualize scholarly research.



Scopus delivers a comprehensive view on the world of research.
No packages, no add-ons. One all-inclusive subscription.



Scopus Data

- 3.7 TB data
- 1.4 billion cited references
- 70,000 Institutional Profiles
- 16 million Author Profiles



Research Metrics

- Journal metrics (e.g. CiteScore, SNIP, SJR)
- Article-level metrics (e.g. Field-Weight Citation Impact)
- Author metrics (e.g. *h*-index)

Evaluate, Plan & Benchmark



Analytical Services

Analytical Services combines high quality data from Scopus to provide accurate, unbiased analyses on research performance.



Scopus Custom Data allows the acquiring of specified datasets from Scopus in a rich and structured XML format.



SciVal

SciVal is powered by Scopus to analyze, visualize and evaluate research performance via:

- Scopus publications
- Citation data

Manage & Showcase



Pure

Pure receives data from Scopus to compile a complete view of your research, awards and activity:

- Publication metrics
- Scopus publication ID's
- Scopus author ID's, journal information



Profile Refinement Service (PRS)

Elsevier's Profile Refinement Service produces disambiguated Scopus author profiles. When used with Pure, PRS speeds up implementation process.



RESEARCH INTELLIGENCE PORTFOLIO

WHO WE SUPPORT

DISCOVER, ANALYZE & NETWORK

Scopus

The broadest source of global scientific research.



Mendeley

Reference manager

Free reference manager and academic social network



Mendeley

Funding

Free discovery tool that catalogs grant information from over 2,000 funders across the globe.



MANAGE & SHOWCASE

Pure

Research information management system and research networking tool



bepress

Digital Commons, EGS

Institutional repository & publishing platform for networks of full-text scholarship



Mendeley Data

A modular, cloud-based platform designed for research institutions to manage the entire lifecycle of research data



EVALUATE, PLAN & BENCHMARK

SciVal

Visualize research performance, benchmark, develop partnerships and analyze research trends



Research Metrics

Comprehensive suite of metrics helps to assess research impact



Scopus Custom Data Analytical Services

Meeting needs from specified datasets to consultative analysis, reports & services



SECURE & ADMINISTER FUNDING

Funding Institutional

Discovery and analysis tool to help increase grant success.



Expert Lookup

Find researchers with expertise who meet your funding priorities and locate the right reviewers



Enabling Features

Fingerprinting Solutions

Pure Award Management

 **Research institutions Administration**

 **Research institutions Libraries & patrons**

 **Funders**

 **Policy Makers**

 **Industry**

 **Ranking organisations**

What needs does research intelligence serve?

DISCOVER, ANALYZE & NETWORK

- Search, discover, read & review
- Do research: experiment, analyze, synthesize
- Collaborate & network
- Identify the next source of research funding

MANAGE & SHOWCASE

- Manage institutional research outputs
- Manage research data, facilities & equipment
- Showcase & disseminate work by ensuring publication
- Commercialize & promote expertise to gain visibility

EVALUATE, PLAN & BENCHMARK

- Develop & refine institutional research strategy
- Identify, recruit & retain research staff
- Increase institutional impact in research & rankings
- Establish strategic partnerships

SECURE & ADMINISTER FUNDING

- Find the next sources of institutional funding
- Manage awards & ensure proper investment
- Administer funding & ensuring grant review by top experts

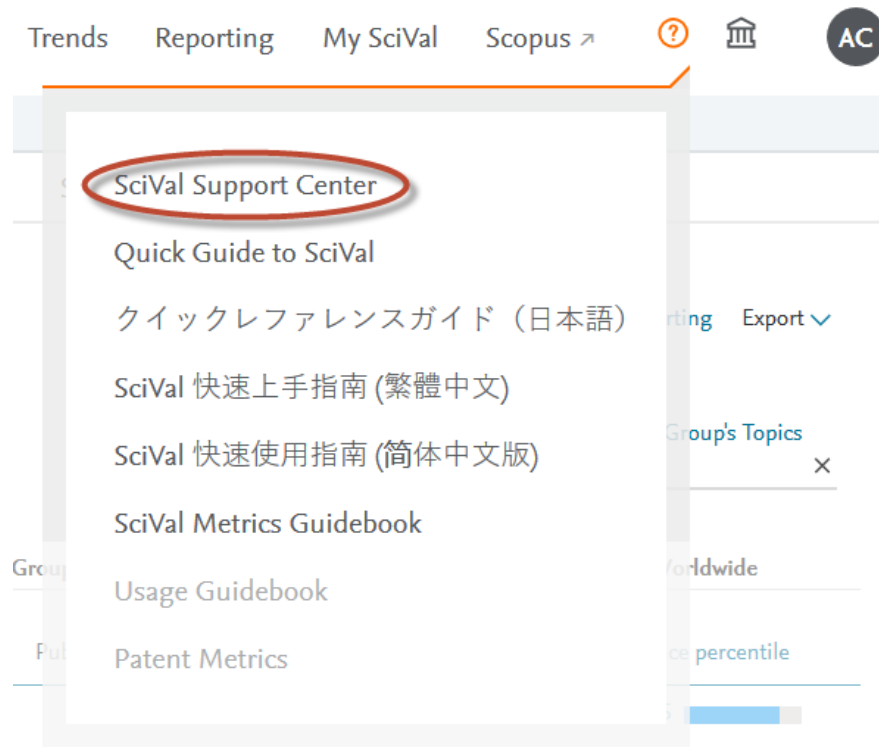
Getting help

Getting help

The spine menu will provide a line to help documentation

<https://service.elsevier.com/app/home/supporthub/scival/>

- Contact me if you have any problems and I will answer the question or find someone who can. name@Elsevier.com or <phone number>.



Stay up-to-date on our latest releases and improvements via scival.com

- Read and share our exciting Twitter updates
- “New in this Release” news section >> see the latest release elements
- SciVal Development Roadmap >> see what’s coming up for SciVal in 2018 and beyond
- Access the latest SciVal Webinars
- Learn exciting new Tips & Tricks via our virtual tour guide in SciVal

What’s new in SciVal?

New in this release

September 2018, code name: Sagan

- **Diacritic support.** To help you find an institution faster, we have enhanced the way we display institution names. We will support local language characters, multiple name variations for an institution (English and up to two local name variations) and a common acronym.
- **Reporting enhancements.** You can now add an analysis directly to an existing Report, or create a new Report within the module you’re using.
- **Enhanced flow to define Research Areas.** We’ve simplified the search options when defining a Research Area and included an advanced search for our power users.

[See the list of previous releases](#)

[Check out SciVal roadmap](#)

Latest webinars

- [Thinking outside the box! Analyze your research activities globally with SciVal](#)
- [SciVal Reporting: Simple, time-saving tips & tricks](#)
- [SciVal API :: What is it & how can I use it?](#)
- [Delving Deeper into Topic Prominence in Science](#)
- [Introduction to SciVal’s Topic Prominence in Science](#)

Quick guide to SciVal

Get a quick overview of SciVal, how you can use it and how it can help you.

1. [Getting started with SciVal](#)
2. [Working with entities](#)
3. [Using SciVal for strategic planning](#)

Need help?

[Go to SciVal Support Center](#)

[Contact the helpdesk](#)

Tweets by @SciVal

[Follow @SciVal](#)

SciVal @SciVal
Have you seen the latest updates to our Reporting functionality? You can now add an analysis directly to an existing Report, or create a new Report within the module you're using bit.ly/2OHRVmd

SciVal @SciVal
SciVal's Sagan release is now LIVE! Diacritic support, to help you find an institution faster. we have

Stay tuned

Sign up for news updates about our latest releases, tips & tricks, webinars and more.

[Sign up >](#)

Find out more

Scopus <https://www.brighttalk.com/channel/13703/scopus>

SciVal <https://www.brighttalk.com/channel/13819/elseviers-research-intelligence>



Societal-economic Impact – Mass Media Mentions

- Acquired by Elsevier in January 2015, **Newsflo** helps researchers and academic institutions to measure the wider impact of their work by tracking and analyzing media coverage of their publications and findings
- Counts mentions of media outlets to research related news (mostly initiated by press releases from research institutions)

The screenshot displays a Newsflo interface for a research article. The article title is "Dinosaur-killing asteroid didn't ravage earth: Study" dated "25 Jan 2015". A blue callout box points to the article text, stating "Tracks over 55,000 English speaking global media sources". Another blue callout box points to the article text, stating "Matched with 8,500 institutions in SciVal". Below the article snippet, there is a "Tags" section with "#Imperial College London" and a "Mentions" section listing various media outlets. At the bottom, there are "Approve Story" and "Reject Story" buttons.

25 Jan 2015 Dinosaur-killing asteroid didn't ravage earth: Study

Tracks over 55,000 English speaking global media sources

Matched with 8,500 institutions in SciVal

Tags: #Imperial College London

Mentions: Russia Today (Russia), Economic Times (India), Oman Observer (Oman), Mail Online UK (United Kingdom), Phys.Org.com (United States), NewsRT.co.uk (United Kingdom), Research & Development (United States), Environmental News Network (United States), Social Dashboard (United States), Exeter University (United Kingdom), Business Standard India (India), Astrobiology Magazine (United States), NetIndia123.com (India), Laboratory Equipment (United States), Siasat Daily (India), Sify (India), Big News Network (United States), Space Daily (Australia), ZeeNews.com (India), Panorama.am (Armenia), NewsHub South Africa (United States), Yahoo! India (India), NetIndia123.com (India), ZeeNews.com (India), Mangalorean (India), DailyMe.Com (India), ProKerala.com (India), The Freepress Journal (India), One News Page United Kingdom (United Kingdom), AllVoices (United States), One News Page United Kingdom (United Kingdom), Machines Like Us (United States).

Approve Story Reject Story

Societal-economic Impact – Mass Media Mentions

Step 1: Newsflo creates clusters of articles

...by clustering press releases and news articles based on text matching.

Step 2: Newsflo identifies clusters with name and affiliation combinations

...and matches against Scopus Author and Affiliation Profiles

Step 3: Tag Author Profiles, Affiliation Profiles and Scopus journal categories to clusters.

Subject area assignment is based on the article fingerprints of the articles in the clusters.

Step 4: Count the number of media mentions

...inside the clusters and assign the counts to:

- Researchers (by their Scopus Author Profiles),
- Institutions (by their Scopus Affiliations)

*We consider all name variants and entire affiliation history stored in the Scopus Author Profile

