



Research Intelligence

SciVal

Aporte para maior visibilidade e desempenho da produção científica

Universidade de São Paulo - 2020

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ELSEVIER



Agenda

Quais módulos estão disponíveis na USP?

Quais são os 7 tipos de entidades diferentes disponíveis no SciVal?

Os usuários precisam se registrar para usar o SciVal?

Quantas instituições são predefinidas no SciVal? Podem ser adicionadas?

É possível criar grupos de autores, instituições, países?

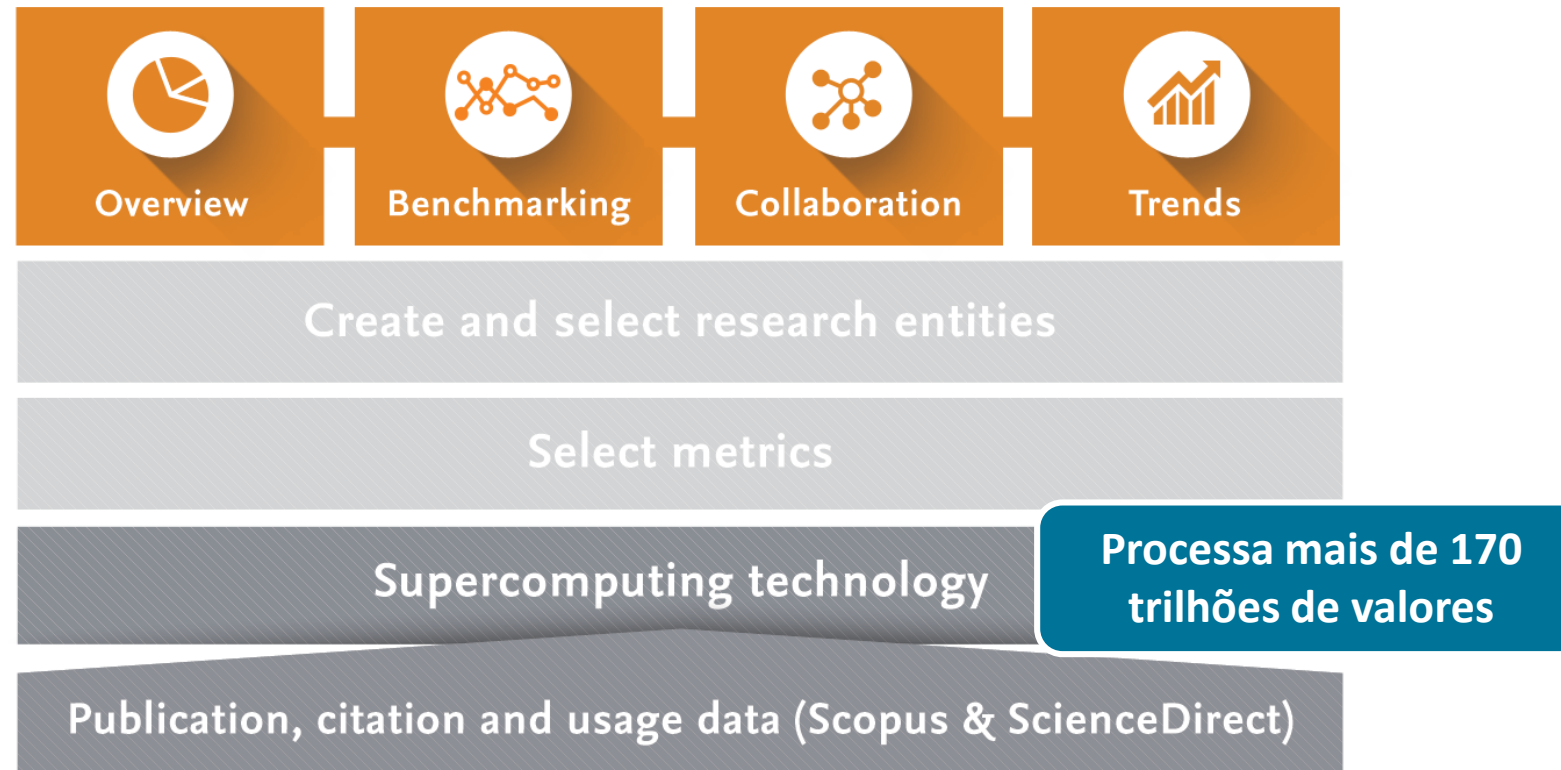
Quais são os 3 tipos diferentes de exportação das análises?

Quais são os intervalos de datas disponíveis no módulo Overview?

Quais são os intervalos de datas disponíveis no Benchmarking?

A estrutura da solução SciVal

Usando tecnologia de computação avançada de análise de dados, o SciVal permite processar instantaneamente uma enorme quantidade de dados para gerar visualizações de dados poderosas sob demanda, em segundos.



SciVal

Acesso rápido e fácil ao desempenho de pesquisas científicas em 230 nações e mais de 18.100 instituições de pesquisa em todo o mundo, bem como grupos de pesquisadores, publicações e áreas específicas de pesquisa.



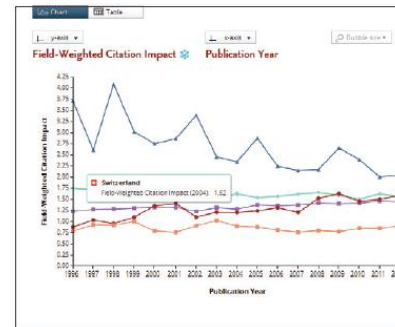
Overview

Panorama da situação atual de qualquer entidade selecionada



Benchmarking

Compare instituições, grupos de pesquisa e pesquisadores



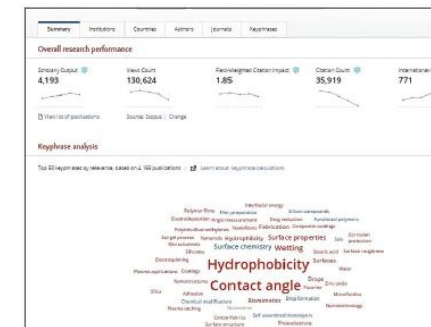
Collaboration

Identifique e analise oportunidades de colaboração existentes e potenciais



Trends

Descubra tendências em áreas específicas de pesquisa




Inputs específicos

Author	Scopus Author ID	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Woo, Lisa	8042105850	Athena University	Faculty of Optometry				
Woo, Stanley Y.	8405576004	Athena University	Faculty of Optometry				
CMoM, Vivian	31971659760	Athena University	Faculty of Optometry				
CMou, B. RalpM	44300491560	Athena University	Faculty of Optometry				
CMristian, Lisa W.T.	8404930030	Athena University	Faculty of Optometry				
Flanagan, JoMn G.	65497049280	Athena University	Faculty of Optometry				
Furtado, Nadine M.	28173350760	Athena University	Faculty of Quantum Computing				
Maines, Lacey	8405668030	Athena University	Faculty of Quantum Computing				
Mildebrand, Jenna M.	7924614547	Athena University	Faculty of Optometry				
Mileeto, Denise	65882871840	Athena University	Faculty of Optometry				
Movis, Jeffery K.	8522382317	Athena University	Faculty of Optometry				
Mudson, CMris J.W.	44305434600	Athena University	Faculty of Optometry				
MutcMings, Natalie	8406617455	Athena University	Faculty of Optometry				
Irving, ElizabetM	20332677000	Athena University	Faculty of Optometry				
Jones, David R.B.	8883020136	Athena University	Faculty of Optometry				
Jones, DeboraM A.	8643046890	Athena University	Faculty of Optometry				



Métricas

Perspectiva Elsevier



Response to HEFCE's call for evidence: independent review of the role of metrics in research assessment

30 June 2014

Yes, Elsevier would be interested in participating in a workshop / event to discuss the use of metrics in research assessment and management.

This response covers the following sections:

- A. Why is Elsevier responding?
- B. For what purposes are research metrics used?
- C. Guiding principles for use of metrics in research assessment
- D. A model for generating and using metrics in research assessment
- E. Implications for using metrics in research assessment
- F. Response to the specific questions posed by HEFCE

Empowering Knowledge

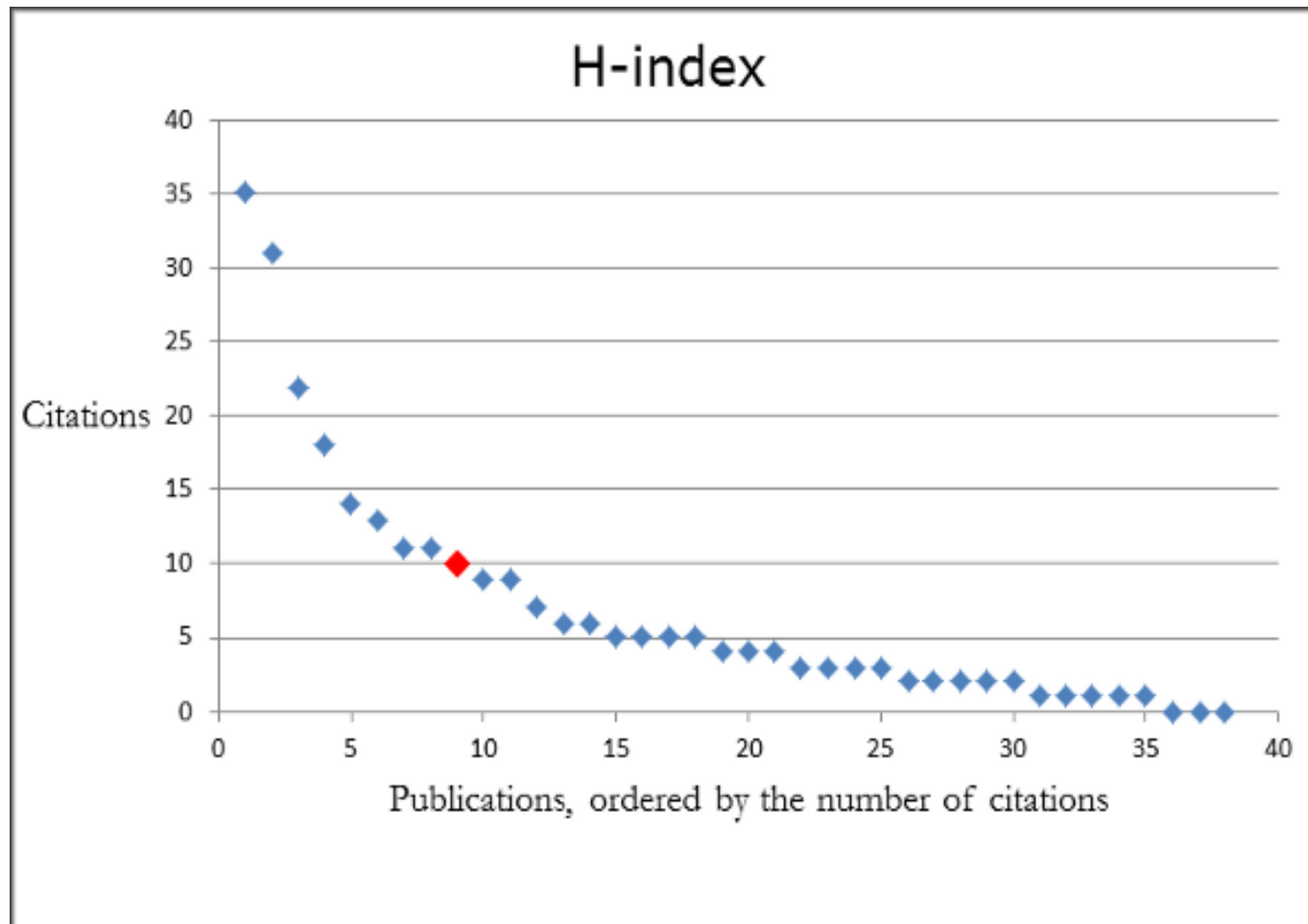
Métricas que também descrevem atividades relacionadas a financiamento, colaboração, comercialização e impacto

Múltiplas métricas usadas em conjunto geram uma análise mais rica

Índice h

Número de artigos X com citações maiores ou iguais a X .

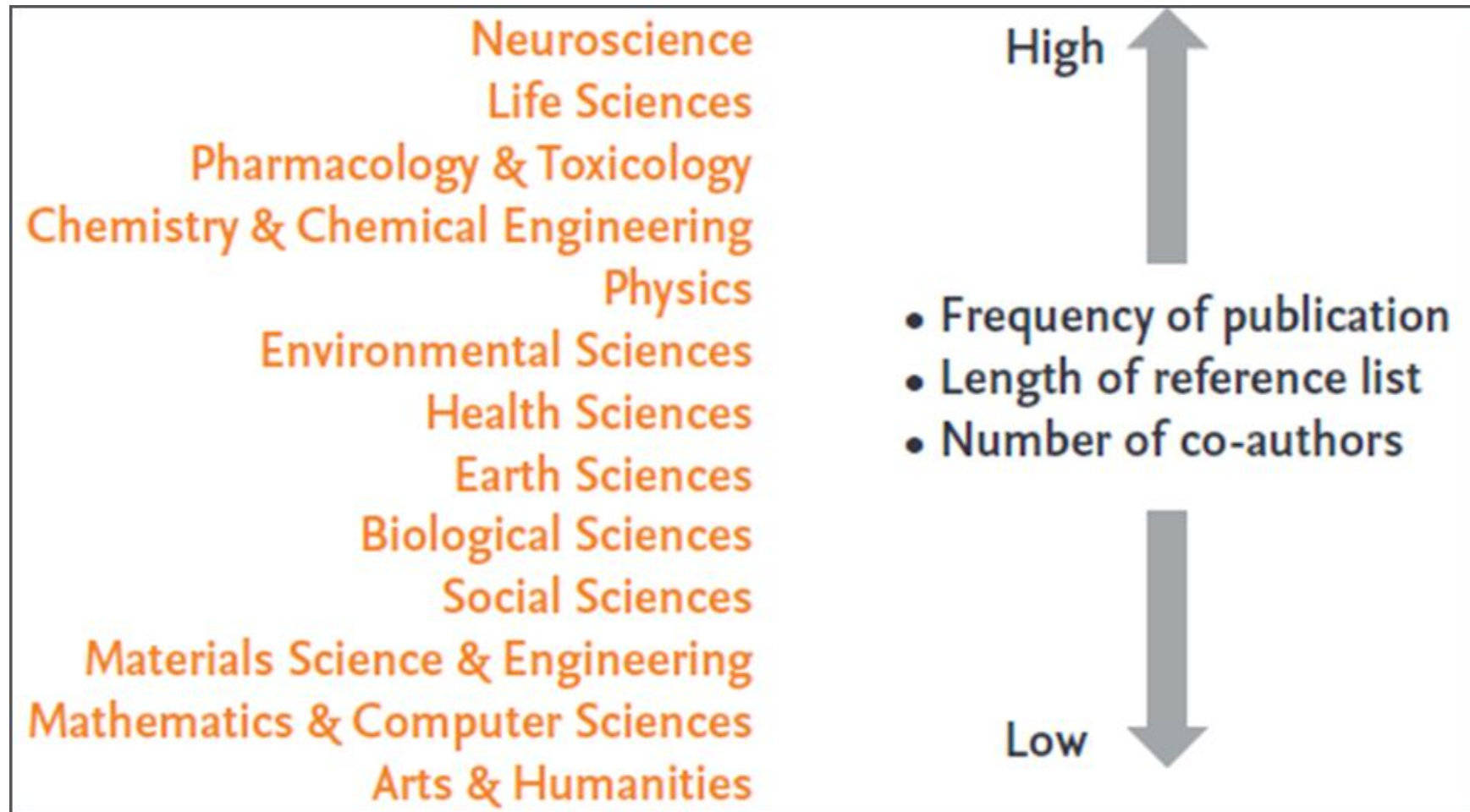
Um pesquisador com índice $h = 5$ tem 5 artigos que receberam 5 ou mais citações



Limitações do h-index

- Padrões de publicação e citação variam entre disciplinas
- Não é sensível ao tempo - Limita os autores pelo número total de publicações, portanto carreiras mais curtas estão em desvantagem
- Artigos altamente citados não são refletidos no índice-h




Características dos campos de conhecimento







Mais de 30 conjuntos de métricas à sua disposição

Mensure e analise seus dados de vários ângulos para identificar seus principais pontos fortes e fracos





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


Disciplinarity 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

Impacto da citação com ponderação por campo

Field-Weighted Citation Impact

A proporção de citações recebidas em relação à média mundial esperada para o campo de conhecimento, tipo de publicação e ano de publicação

4.9 Metric: Field-Weighted Citation Impact

Field-Weighted Citation Impact in SciVal indicates how the number of citations received by an entity's publications compares with the average number of citations received by all other similar publications in the data universe: how do the citations received by this entity's publications compare with the world average?

- A Field-Weighted Citation Impact of 1.00 indicates that the entity's publications have been cited exactly as would be expected based on the global average for similar publications; the Field-Weighted Citation Impact of "World", or the entire Scopus database, is 1.00
- A Field-Weighted Citation Impact of more than 1.00 indicates that the entity's publications have been cited more than would be expected based on the global average for similar publications; for example, 2.11 means 111% more cited than world average
- A Field-Weighted Citation Impact of less than 1.00 indicates that the entity's publications have been cited less than would be expected based on the global average for similar publications; for example, 0.87 means 13% less cited than world average

Similar publications are those publications in the Scopus database that have the same publication year, publication type, and discipline, as represented by the Scopus journal classification system:

More information: [SciVal Metrics Guidebook](#)

Journal Metrics

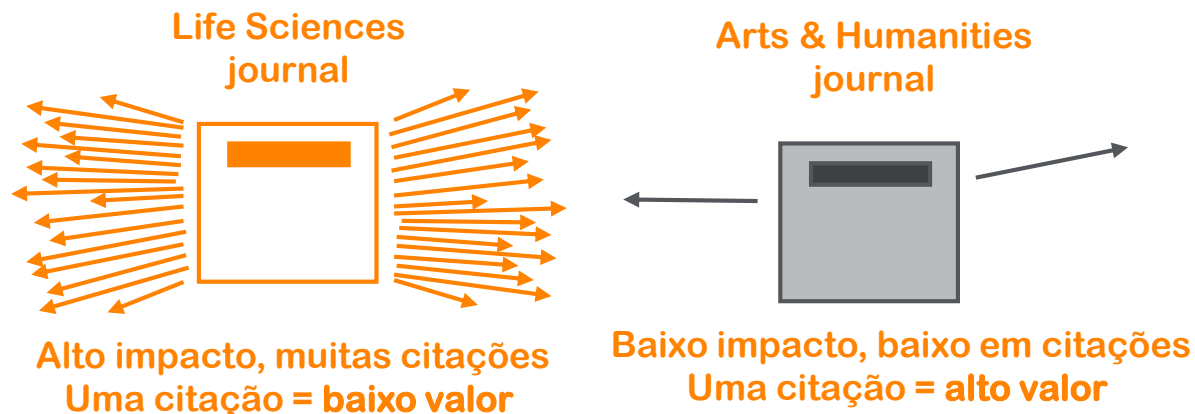
Use métricas em nível de periódico para identificar a reputação dos mesmos e selecione o periódico certo para publicar sua pesquisa

Journal metrics

- **CiteScore**: a média de citações por documento que um título recebe em um período de três anos
- **SNIP (Source-normalized impact per paper)**: mede o impacto da citação por publicação ponderando as citações por campo de assunto



- **SJR (SCImago Journal Rank)**: As citações são ponderadas dependendo de onde elas vêm



Módulos

Módulo Overview

Universidade de Sao Paulo

118th (QS) · 251-300 (THE) · 151-200 (ARWU) | Brazil | [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

+ Add Summary to Reporting Export

Overall research performance

+ Add to Reporting

Scholarly Output

77,874 ▲

[View list of publications](#)

Authors

59,134 ▲

Field-Weighted Citation Impact

1.12

Citation Count

479,870

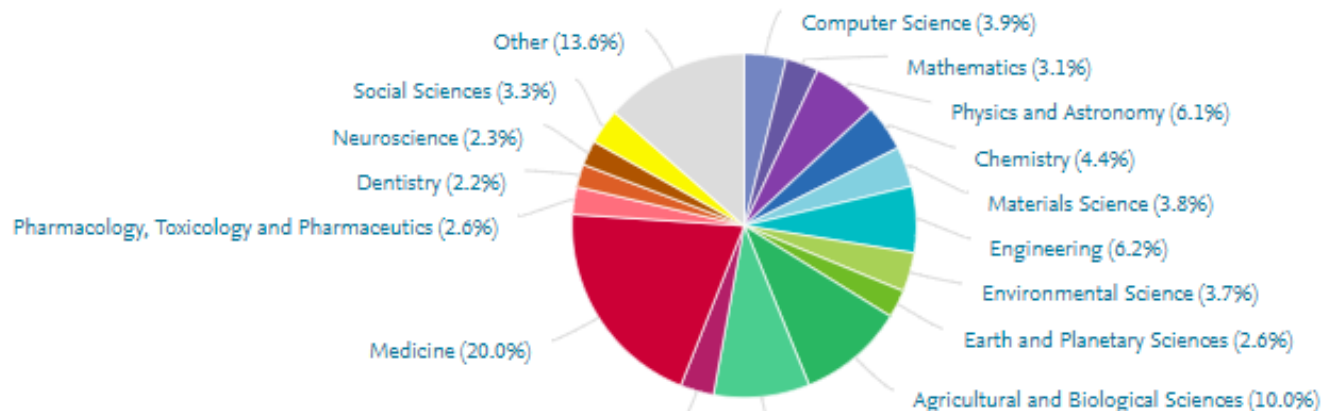
Citations per Publication

6.2

h5-index

147

+ Add to Reporting



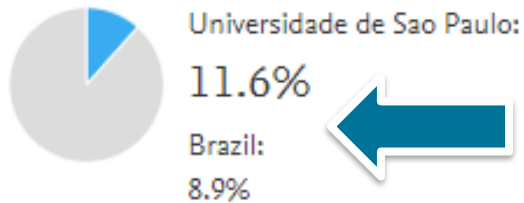
Módulo Overview

Performance indicators

Outputs in Top Citation Percentiles

+ Add to Reporting

Publications in top 10% most cited worldwide



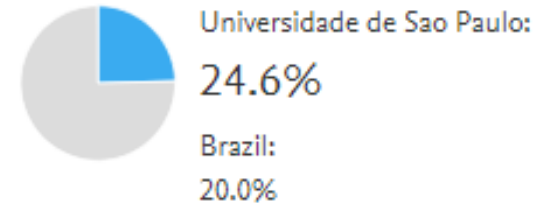
> Analyze in more detail

Quantas publicações estão no top 1%, 5%, 10% ou 25% das publicações mais citadas no mundo?

Publications in Top Journal Percentiles

+ Add to Reporting

Publications in top 10% journals by CiteScore Percentile

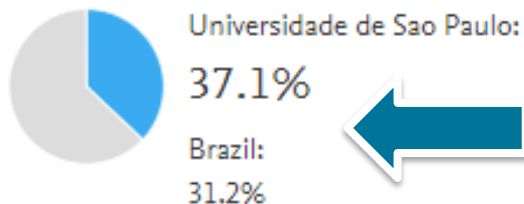


> Analyze in more detail

International Collaboration

+ Add to Reporting

Publications co-authored with Institutions in other countries



> Analyze in more detail

Academic-Corporate Collaboration

+ Add to Reporting

Publications with both academic and corporate affiliations



> Analyze in more detail

Módulo Overview

2014 to 2019



no subject area filter selected



Módulo Benchmarking

Benchmarking

2010 to 2018 no subject area filter selected ASJC

[Data sources](#)

[+ Add to Reporting](#) [Export](#)

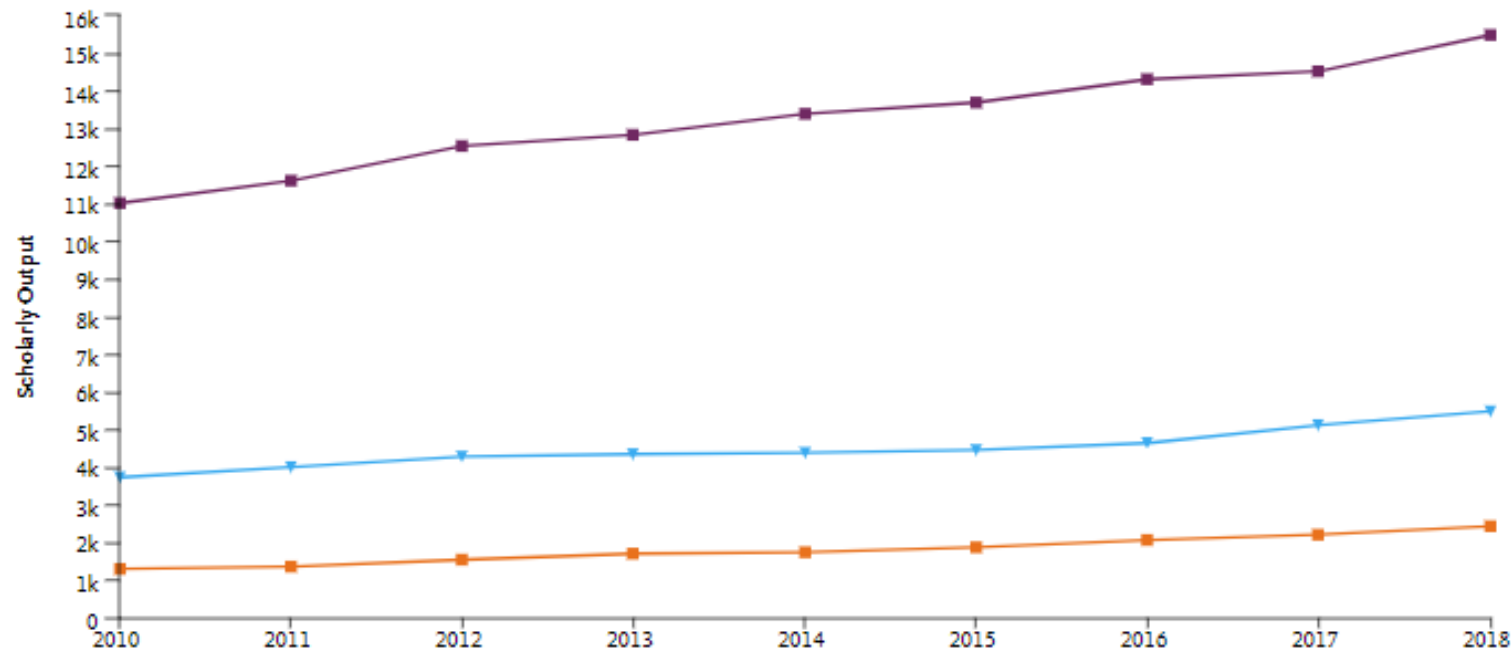
y-axis

x-axis

Bubble size

Scholarly Output

Publication Year



- Institutions and Groups
- Universidade Estadual de Campinas
 - Universidade de Brasilia
 - Universidade de Sao Paulo

[View list of Scopus Sources for the selected Researchers and Groups](#)

Módulo Benchmarking

2010 to 2018

Physics and Astronomy

ASJC

[Data sources](#)

Chart Table

+ Add to Reporting Export

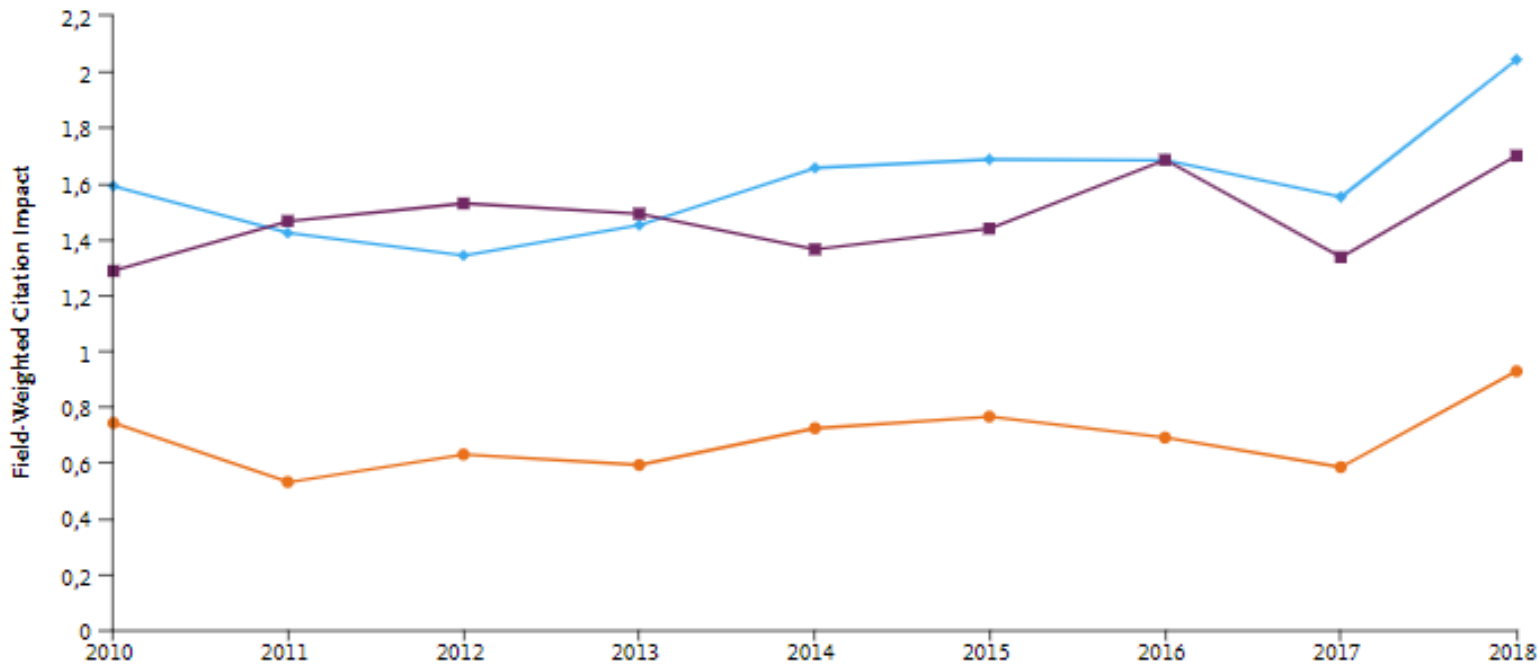
y-axis

Field-Weighted Citation Impact

x-axis

Publication Year

Bubble size



Institutions and Groups

- Universidade Estadual de Campinas
- Universidade de Brasilia
- Universidade de Sao Paulo

[View list of Scopus Sources for the selected Researchers and Groups](#)

Colaboração

Top collaborating Institutions

+ Add to Reporting Export Shortcuts

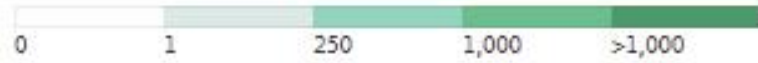
by number of publications co-authored with Universidade de Sao Paulo

Institution	Co-authored publications ↓	Citations received for co-authored publications	Co-authors	Field-Weighted Citat... ▾
1. 🇧🇷 Universidade Estadual Paulista Julio de Mesquita Filho	5,204 ▲	27,069	5,982 ▲	0.96
2. 🇧🇷 Universidade Estadual de Campinas	3,936 ▲	33,085	3,820 ▲	1.36
3. 🇧🇷 Universidade Federal de Sao Paulo	3,477 ▲	29,424	3,719 ▲	1.52
4. 🇧🇷 Universidade Federal do Rio de Janeiro	2,322 ▲	35,526	2,442 ▲	2.25
5. 🇧🇷 Universidade Federal de Sao Carlos	2,307 ▲	11,497	1,949 ▲	0.90
6. 🇫🇷 CNRS	1,960 ▲	46,797	2,742 ▲	3.41
7. 🇺🇸 Harvard University	1,931 ▲	80,333	2,176 ▲	7.60
8. 🇧🇷 Universidade Federal de Minas Gerais	1,927 ▲	38,865	2,701 ▲	4.16
9. 🇧🇷 Universidade Federal do Rio Grande do Sul	1,528 ▲	32,321	1,675 ▲	4.68
10. 🇧🇷 Instituto do Coracao do Hospital das Clinicas	1,526 ▲	10,149	1,758 ▲	1.34

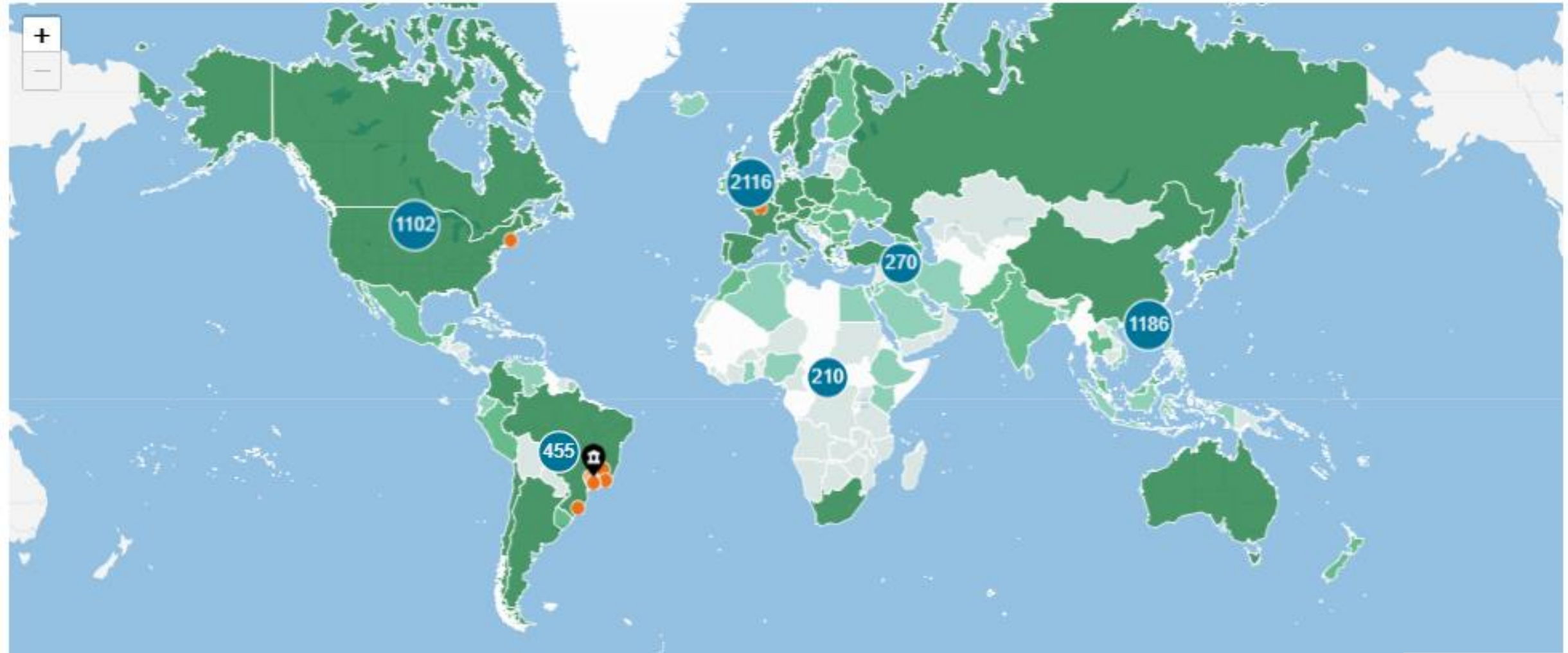


Módulo Collaboration

Co-authored publications per country/region:



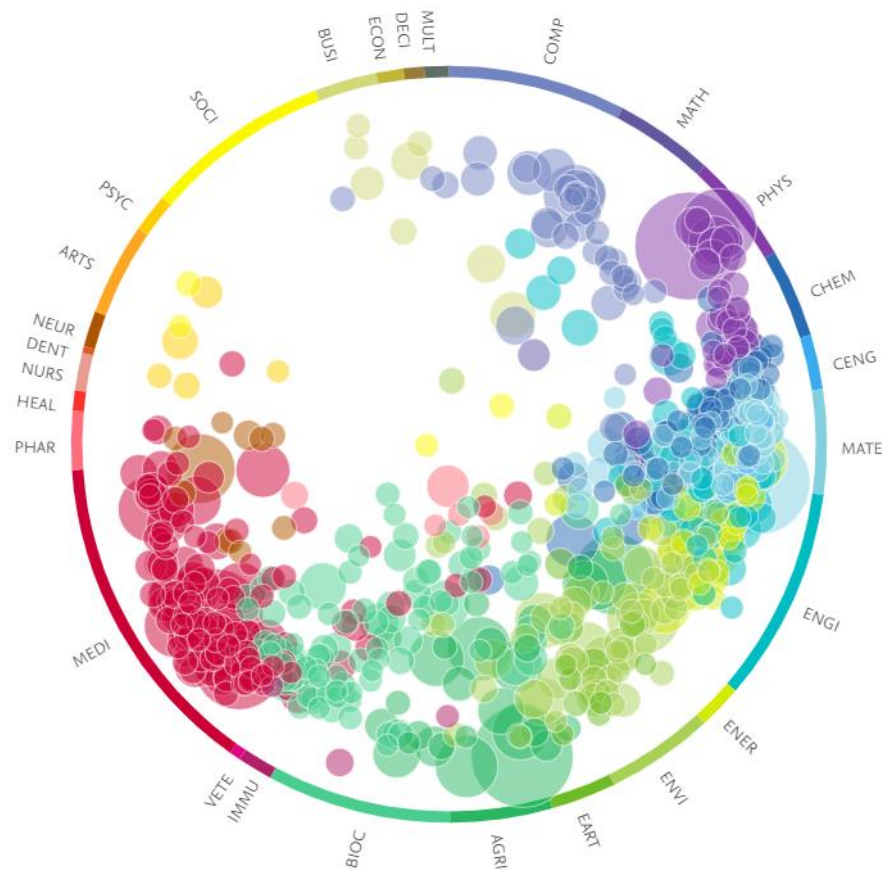
● Top 10 institutions worldwide by co-authored publications



Tópicos de Proeminência

Avanços recentes em clustering e modelagem nos permitem dividir a ciência em Tópicos

○ ○ Bubble size: Scholarly Output of Brazil View: Top 1% of worldwide Topics by Prominence



Quais são os Tópicos com alto “momentum”, que provavelmente serão bem financiados?

Quais são os tópicos mais proeminentes em que esta instituição está ativa?

Quais são alguns dos tópicos relacionados ao meu, com muito ímpeto?

Há algum outro tópico que eu deva ficar de olho?

Módulo Trends

Activity of Universidade de Sao Paulo



Within: Secondary Batteries; Electric Batteries; Lithium Alloys TC.30 | Year range used for metrics: 2014 to 2019 | Analyze Topic Cluster worldwide

Summary Authors Topics

Performance

Export

Scholarly Output

141



View list of publications

Views Count

4,669

Field-Weighted Citation Impact

1.04



Citation Count

917

International Collaboration

80



Worldwide Topic Cluster Prominence

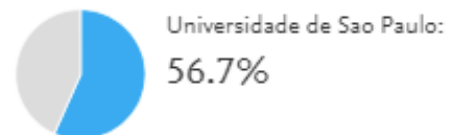
100.000



Collaboration

International Collaboration

Publications co-authored with Institutions in other countries



Top 15 keyphrases

Based on 141 publications

Relevance of keyphrase



Módulo Trends

Secondary Batteries; Electric Batteries; Lithium Alloys

2014 to 2019

[Data sources](#)

- Summary
- Institutions
- Countries
- Authors
- Scopus Sources
- Keyphrases
- Topics



This Topic Cluster is made up of 87 Topics
[Learn about the clustering method >](#)

+ Add Summary to Reporting

Overall research performance

+ Add to Reporting

Scholarly Output

100,568



[View list of publications](#)

Views Count

3,189,442

Field-Weighted Citation Impact

2.19



Citation Count

1,741,164

International Collaboration

22,796



Topic Cluster Prominence percentile

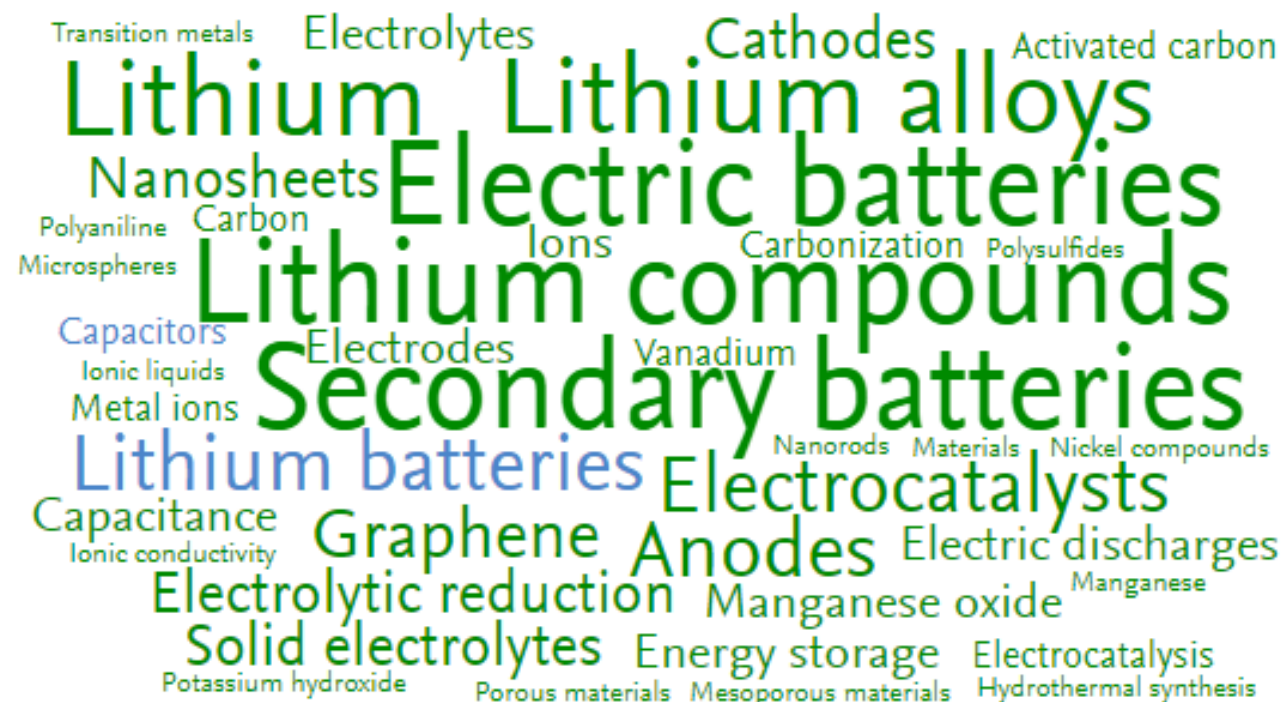
100.000



Módulo Trends

Topic Cluster character

Top 50 keyphrases by relevance, based on 109,971 publications | [Learn about keyphrase calculations](#) >



AAA relevance of keyphrase | declining AAA growing (2013-2017)

> Analyze in more detail

Reporting

No Módulo de “Reporting” é possível criar um **Relatório de Competências** para um pesquisador selecionado, descrevendo seu desempenho geral de pesquisa para o Período 2013-2018. Inclua as seguintes métricas:

- Scholarly Output
- FWCI
- Citation Count
- Citations per Publication
- h-index, h5-index
- Top percentiles
- Cited publications
- Predominant research field and sub-discipline
- Number of Prominent Topics globally
- Top collaborating institutions
- Top journals

SciVal DEMO

Elsevier Research Intelligence

Obrigada!

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www.elsevier.com/research-intelligence

