

Formación de Web of Science

Sesión D3 – Los Highly Cited Researchers
y Research Fronts

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Sesión D3 – Los Highly Cited Researchers y Research Fronts

- ¿Qué es un Research Front?
- Lo que significa ser un Highly Cited Researcher
- Nuestro programa de reconocimiento a los investigadores

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Why Essential Science Indicators?

Is your institution producing breakthrough research?



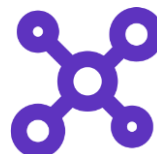
Highly Cited papers

Papers from the most recent ten years, which have reached the top 1% citation threshold for their designated publication year and subject category.



Hot Papers

Papers from the most recent two years, which have reached the top 0.1% citation threshold. This indicates an exceptionally high number of citations soon after publication.



Research Fronts

Highly Cited Papers that have been co-cited, forming the leading edge of current research in 22 subject areas.

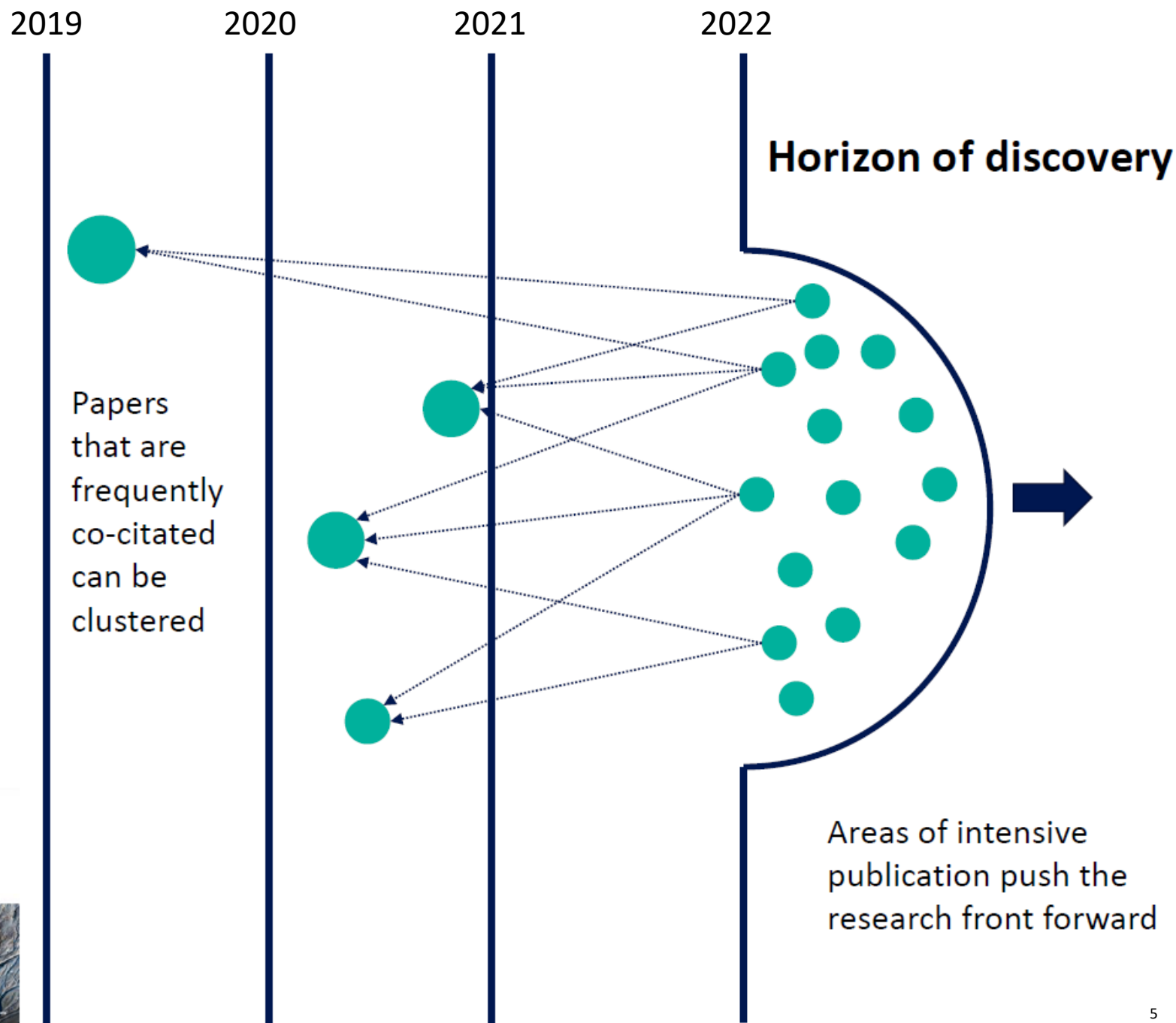
Essential Science Indicators (ESI) was created in 2001 to help you identify top-performing research in Web of Science Core Collection.

ESI surveys more than 11,000 journals from around the world to rank institutions, countries and journals in 22 broad fields based on publication and citation performance.

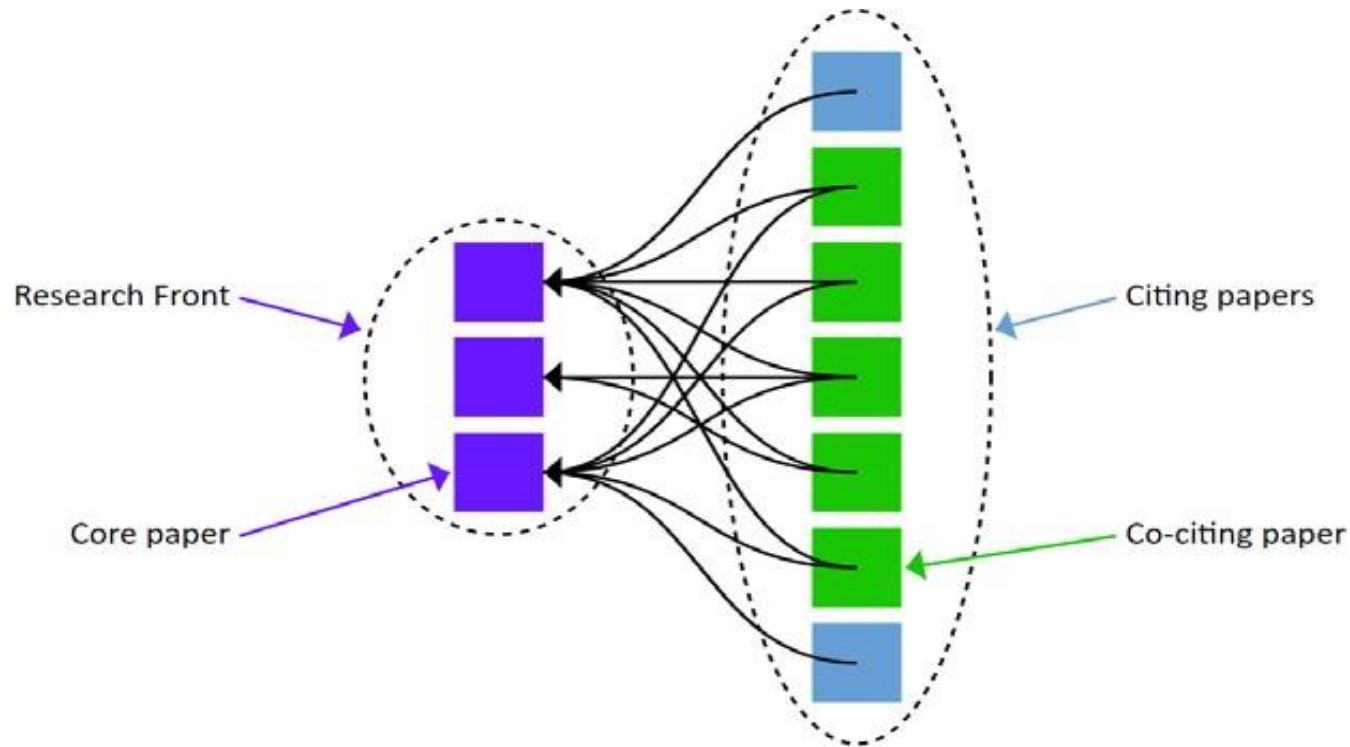
Research Fronts

At the horizon, intensive publication activity can be detected and grouped according to the previous research that was cited (aka co-citation)

The most highly cited papers serve as landmarks, allowing us to cluster related research into Research Fronts – areas of intensive publication on the leading edge of scientific discovery



What is a Research Front?



- A subset of recent literature (the current year and prior five years – 2016-2021) from Essential Science Indicators (ESI) is selected for analysis.
- With clusters of highly cited papers in place, we form a set of core papers for each Research Front and attach the set of co-citing papers, those that are more recent and at the leading edge.
- Field Classification: Research fronts are assigned to the 22 broad fields based on the field of the most frequently occurring journal in the front.

Research Fronts in Essential Science Indicators

Results List

Research Fronts

Filter Results By ?

Changing the filter field removes all current filters.

Add Filter »

* Immunology

Include Results For

Top Papers

Clear

Save Criteria

Map View by Top / Hot / Highly Cited Papers

Show Visualization +

Report View by Selection

Customize

Total: 303

Research Fronts

Top Papers

Mean Year

1 SARS-COV-2 RNA DETECTION; EARLY SARS-COV-2 OUTBREAK DETECTION; WASTEWATER ANTICIPATED COVID-19 OCCURRENCE; SARS-COV-2 DETECTION; SARS-COV-2 RNA

2 RELAPSED/REFRACTORY CLASSIC HODGKIN LYMPHOMA; RELAPSED HODGKIN LYMPHOMA; REFRACTORY CLASSICAL HODGKIN LYMPHOMA (ORIENT-1); RELAPSED/REFRACTORY PRIMARY MEDIASTINAL LARGE B-CELL LYMPHOMA; ADVANCED STAGE CLASSIC HODGKIN LYMPHOMA

3 COVID-19 VACCINE HESITANCY WORLDWIDE; COVID-19 VACCINE HESITANCY; COVID-19 VACCINE ACCEPTANCE; FUTURE COVID-19 VACCINE; ACCEPT COVID-19 VACCINE

4 SEVERE COVID-19 INFECTION; DYNAMIC COVID-19 IMMUNE SIGNATURE INCLUDES ASSOCIATIONS; COVID-19 PATIENT COVID-19 CONVALESCENT INDIVIDUALS; CROSS-REACTION SARS-COV-2 T CELL EPITOPES

5 NATIONAL PROSPECTIVE OBSERVATIONAL SWISS COVID-19 LUNG; COVID-19 SURVIVORS THREE MONTHS; POST-ACUTE COVID-19 SYNDROME; NONCRITICAL COVID-19 TWO MONTHS; CONVALESCENT COVID-19 PATIENTS

Documents

Filter Results By ?

Add Filter »

* COVID-19 VACCINE HESITANCY WORLDWIDE; COVID-19 VACCINE HESITANCY; COVID-19 VACCINE ACCEPTANCE; FUTURE COVID-19 VACCINE; ACCEPT COVID-19 VACCINE

Include Results For

Top Papers

Clear

Save Criteria

Sort By: Citations

Customize Documents

1 - 10 of 41

1 A GLOBAL SURVEY OF POTENTIAL ACCEPTANCE OF A COVID-19 VACCINE

By: LAZARUS, JV; RATZAN, SC; PALAYEW, A; et al

Source: NATURE MEDICINE 27 (2): 225-+ FEB 2021

Research Fields: MOLECULAR BIOLOGY & GENETICS

Times Cited: 184

ESI Hot

Research Front

2 VACCINE HESITANCY: THE NEXT CHALLENGE IN THE FIGHT AGAINST COVID-19

By: DROR, AA; EISENBACH, N; TAIBER, S; et al

Source: EUROPEAN JOURNAL OF EPIDEMIOLOGY 35 (8): 775-779 AUG 2020

Research Fields: SOCIAL SCIENCES, GENERAL

Times Cited: 113

ESI Hot

Research Front

3 ATTITUDES TOWARD A POTENTIAL SARS-COV-2 VACCINE A SURVEY OF US ADULTS

By: FISHER, KA; BLOOMSTONE, SJ; WALDER, J; et al

Source: ANNALS OF INTERNAL MEDICINE 173 (12): 964-+ DEC 15 2020

Research Fields: CLINICAL MEDICINE

Times Cited: 110

ESI Hot

Research Front

The clusters are named using a semi-automatic process based on frequently occurring title words and phrases.

More resources

- [Research Fronts 2022 highlights hot and emerging fields, including vaccine hesitancy, 'mega-fires' and asteroids](#)
- [Find the report "Research Fronts 2022" here](#)

Identifying Research Fronts in the Web of Science: From Metrics to Meaning

Discover hot and emerging research areas to shape your institution's strategic direction

Research evaluators and policymakers frequently use quantitative measures based on publication and citation data as a complement to expert peer review to inform assessment and strategic decision-making. While ranks and scores have their uses, they are limited in revealing many aspects of research activity and different dimensions of contributions.

Thanks to advances in the handling and visualization of very large datasets, it is possible to see – and visit – the leading edge of scientific and scholarly research through science mapping and data visualization. This includes locating individuals, institutions, funders, and journals within this landscape and evaluating organizational participation in different areas, as well as changes over time.

Due to the volume of research published worldwide, and complexity of organizational and researcher networks, it can be challenging to identify early breakthroughs and understand the extent to which your organization is participating in the leading edge of science. In this report, we explore how you can easily track emerging research areas to help shape your institution's strategic direction. Stay ahead of the curve by using Research Front data derived from the Web of Science™ to inform and improve your research assessment.



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Highly Cited Researchers 2022

November 15, 2022

Highly Cited Researchers 2022: Using deeper qualitative analysis to help spot research misconduct



DAVID PENDLEBURY

Head of Research Analysis at the Institute for Scientific Information
Clarivate

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Today we reveal our annual list of Highly Cited Researchers. This year we recognize 6,938 scientists and social scientists who demonstrate significant and broad influence among their peers in their chosen field or fields of research.

The exceptional individuals designated Highly Cited Researchers 2022 have published multiple highly cited papers, ranking in the top 1% by citations for field and year over the last decade. Of all the world's researchers, they are one in 1,000.

What it means to be a Highly Cited Researcher

Highly Cited Researchers

- 2022 Recipients
- Researcher stories
- Analysis
- Methodology
- Past lists
- FAQs

Highly Cited Researchers have demonstrated significant and broad influence reflected in their publication of multiple highly cited papers over the last decade.

These highly cited papers rank in the top 1% by citations for a field or fields and publication year in the [Web of Science™](#).

Of the world's population of scientists and social scientists, Highly Cited Researchers™ are 1 in 1,000.

2022 Analysis

Experts from the Institute for Scientific Information™ provide exclusive insight into the list of Highly Cited Researchers 2022, including regional, institutional and field of study breakdowns and much more.

[Read analysis of this year's list.](#)

6,938

Highly Cited Researchers in 2022

<https://clarivate.com/highly-cited-researchers/>

What it means to be a Highly Cited Researcher

Methodology

<https://clarivate.com/highly-cited-researchers/methodology/#methodology>

Please read the full methodology with care to understand both the meaning and the inevitable limitations of our analytical approach.

Total of Highly Cited Papers over the past 10 years

Overview

Context = 21 fields from Essential Science Indicators

Highly Cited Researchers™ from Clarivate™ is an annual list recognizing influential researchers in the sciences and social sciences from around the world.

The 2022 list contains about 4,000 Highly Cited Researchers in 21 fields of the sciences and social sciences and about 3,200 Highly Cited Researchers identified as having exceptional performance across several fields. The list focuses on contemporary research achievement: only highly cited papers in the sciences and social sciences journals indexed in the [Web of Science Core Collection™](#) during the 11-year period 2011 to 2021 were surveyed. Highly cited papers are defined as those that rank in the top 1% by citations for field and publication year.

The data derived from [Essential Science Indicators™ \(ESI\)](#), a component of [InCites™](#). The fields are also those employed in ESI – 21 broad fields defined by sets of journals and exceptionally, in the case of multidisciplinary journals such as

The ESI fields vary greatly in size, with Clinical Medicine being the largest and Economics and Business being the smallest in terms of researchers. The square root of the number of authors in each field indicated how many individuals should be selected.

Authors with the greatest number of highly cited papers in an ESI field at the threshold for inclusion and above are putative selectees. However, another criterion for selection is that the researcher must have enough citations to their highly cited papers to rank among all authors in the top 1% by total citations in the ESI field in which that person is considered. All who published highly cited papers at the threshold level and with citations in the field at the level of top 1% are admitted to the list, even if the final list then exceeds the number given by the square root calculation.

In addition, and as concession to the somewhat arbitrary cut-off, any researcher with one fewer highly cited paper than the threshold number is also admitted to

Highly Cited Researchers 2022

Highly Cited Researchers

[2022 Recipients](#)[Researcher stories](#)[Analysis](#)[Methodology](#)[Past lists](#)[FAQs](#)

Award category

Institution

Spain

Search by name

Submit

1234...11>

	FULL NAME	CATEGORY	PRIMARY AFFILIATION	SECONDARY AFFILIATIONS	
JA	Alonso, Jordi	Cross-Field	Pompeu Fabra University, Spain	Institut Hospital del Mar d'Investigacions Mediques (IMIM), Spain	View Profile
PA	Alonso-Coello, Pablo	Social Sciences	Sant Pau Institute for Biomedical Research (IIB Sant Pau), Spain	CIBERESP, Spain	View Profile
CA	Andres-Lacueva, Cristina	Cross-Field	University of Barcelona, Spain	CIBERFES, Spain	View Profile
CA	Arango, Celso	Psychiatry and Psychology	General University Gregorio Maranon Hospital, Spain	CIBERSAM - Centro de Investigación en Red de Salud Mental, Spain	View Profile
MA	Araújo, Miguel Bastos	Environment and Ecology	Consejo Superior de Investigaciones Cientificas (CSIC), Spain	University of Evora, Portugal	View Profile
JA	Araus, Jose Luis	Cross-Field	University of Barcelona, Spain		View Profile

Highly Cited Researchers 2022

Clarivate adds automatically the awards in each researcher profile in the Web of Science

The screenshot displays the Web of Science profile for Albert Saiz. The profile includes a circular icon with the initials 'AS', the name 'Albert Saiz' with a green checkmark, and the affiliation 'Universitat de Barcelona'. A blue arrow points to the 'Highly cited' badge. Below this, the 'Web of Science ResearcherID: K-8236-2014' is listed. The 'Published names' section shows variations of the name: 'Saiz, A.', 'Saiz, A', 'Saiz, Albert', 'Saiz, Antonio', and 'Saiz, AD', with a 'Show more' link. The 'Published Organizations' section lists 'Hospital Clinic de Barcelona, University of Barcelona, Central University Hospital Asturias' with a 'Show more' link. The 'Subject Categories' section, marked as 'BETA', lists 'Neurosciences & Neurology; Immunology; Psychiatry; Surgery; General & Internal Medicine'. The 'Awards' section, highlighted with a red box, lists two awards: 'Highly Cited Researcher in the field of Neuroscience and Behavior - 2022' and 'Highly Cited Researcher in the field of Cross-Field - 2020'. The 'Other Identifiers' section shows the ORCID iD 'https://orcid.org/0000-0002-5793-8791'. At the bottom, the 'Documents' tab is selected, showing '258 Documents'. A filter bar at the bottom indicates '14' publications are included, with options for 'All Publications' and 'Date: newest first'.

Albert Saiz ✓
Highly cited
Universitat de Barcelona

Web of Science ResearcherID: K-8236-2014

Published names ⓘ Saiz, A. Saiz, A Saiz, Albert Saiz, Antonio Saiz, AD [Show more](#)

Published Organizations ⓘ Hospital Clinic de Barcelona, University of Barcelona, Central University Hospital Asturias [Show more](#)

Subject Categories BETA Neurosciences & Neurology; Immunology; Psychiatry; Surgery; General & Internal Medicine

Awards

- Highly Cited Researcher in the field of Neuroscience and Behavior - 2022
- Highly Cited Researcher in the field of Cross-Field - 2020

Other Identifiers ⓘ <https://orcid.org/0000-0002-5793-8791>

Documents Peer Review

258 Documents

☒ Include publications not indexed in Core Collection (14) ⓘ All Publications ▾ Date: newest first ▾ < 1 of 6 >

The news & Clarivate statement

SIRIS

A-C-A-D-E-M-I-C

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Clarivate statement on Highly Cited Researcher affiliations

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Company Statement

Clarification of how we identify and publish primary researcher affiliations in the Highly Cited Researchers program

David Pendlebury – Head of Research Analysis, Institute for Scientific Information

REPORT

Full International Edition (2014–22): The affiliation game of Saudi Arabian higher education & research institutions

Analysing development of affiliation practices in the Highly Cited Researchers™ list from Clarivate™ between 2014–2022

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Researcher Recognition

<https://clarivate.com/webofsciencegroup/researcher-recognition/>

Highly Cited Researchers

Of the world's scientists and social scientists, Highly Cited Researchers truly are one in 1,000. These pioneers in their fields represent the most influential researchers who have published multiple papers frequently cited by their peers that rank in the top 1% of citations for field and year in the Web of Science.

[Visit Highly Cited Researchers 2021](#)

“If I have seen further, it is by standing upon the shoulders of giants.” *

See, share and celebrate the giants of research.

[View the 2022 Citation Laureates](#)

Eugene Garfield Award for Innovation in Citation Analysis

Established in 2017, this international award honors Eugene Garfield's legacy of generosity and support for scientists around the world. It recognizes early career researchers in scientometrics developing innovative techniques in citation analysis that deepen our understanding of scientific and scholarly communication.

Citation Laureates explained


NEWS

SEPTEMBER 21, 2022

5 MINUTE READ

Clarivate Reveals Citation Laureates 2022 – Annual List of Researchers of Nobel Class

Share this article



64 Citation Laureates named by the Institute for Scientific Information have gone on to receive a Nobel Prize

Determining a Nobel level of influence

Since 2002, Clarivate has named Citation Laureates in the areas recognized by the Nobel Prize: Physiology or Medicine, Physics, Chemistry and Economics. These researchers have laid the foundations for their fields, often pioneering whole new areas of science and paving the way for those who have come after them. Citation Laureates also exhibit exceptional levels of citation among their peers and have often produced multiple highly cited papers.

However, a high level of citation is only a prerequisite for selection on this prestigious list. While we say that citations at high frequency reflect contributions that have been influential in some way, we also maintain that citation data should be combined with qualitative information and human judgement. In order to do this, we analyze:

- **Discovery:** whether the authors of the highly cited papers were the primary discoverers within their research topic
- **Awards:** whether the researchers have received international or national awards for this research
- **Nobel ‘taste’:** whether the identified achievements ‘make sense’ alongside past choices
- **Timing:** whether the topics would likely receive attention or if they are ‘too similar’ to recent Nobel prizes or ‘too soon’ (Nobel recognition typically comes 20 years or more after a published discovery or contribution)

Successful Nobel Predictions

Since the inception of the Citation Laureates in 2002, our analysts have identified 71 eminent scientists and economists who went on to receive the Nobel Prize.

Jennifer A. Doudna Facts



Jennifer A. Doudna
The Nobel Prize in Chemistry 2020

Born: 19 February 1964, Washington, DC, USA

Affiliation at the time of the award: University of California, Berkeley, CA, USA

Prize motivation: "for the development of a method for genome editing."

Prize share: 1/2

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Brittany Hosea-Small

Emmanuelle Charpentier Facts



Emmanuelle Charpentier
The Nobel Prize in Chemistry 2020

Born: 11 December 1968, Juvisy-sur-Orge, France

Affiliation at the time of the award: Max Planck Unit for the Science of Pathogens, Berlin, Germany

Prize motivation: "for the development of a method for genome editing."

Prize share: 1/2

© Nobel Prize Outreach. Photo:
Bernhard Ludewig

A Programmable
Dual-RNA-Guided
DNA Endonuclease
in Adaptive
Bacterial Immunity
(Science, 2012)

Prize motivation: "for the development of a method for genome editing."
The CRISPR/Cas9 gene scissors can lead to new scientific discoveries, better crops and new weapons in the fight against cancer and genetic diseases.

Eugene Garfield Award for Innovation in Citation Analysis

2022 Award Winner Dr. Saeed Ul Hassan

The late Dr. Saeed Ul Hassan's proposal focused on improving science communications using AI. His project was to develop an automated, freely available online tool that would both simplify and summarize text from scientific literature, addressing the real-world challenge of making scientific papers approachable and accessible to the public.

Sadly, Dr. Ul Hassan passed away suddenly before he could be informed of his success.

Dr. Saeed Ul Hassan

Senior lecturer in AI/Data Science, Manchester
Metropolitan University

United Kingdom

Concluding the training

Streamline the research workflow

Solutions to enhance researching, writing, and publishing reviews



Web of Science

- Search a trusted, high quality, multidisciplinary citation index



Journal Citation Reports

- Evaluate peer-reviewed titles



Essential Science Indicators

- Identify influential papers in your field



EndNote

- Collect, organize, and cite references with ease



EndNote Click

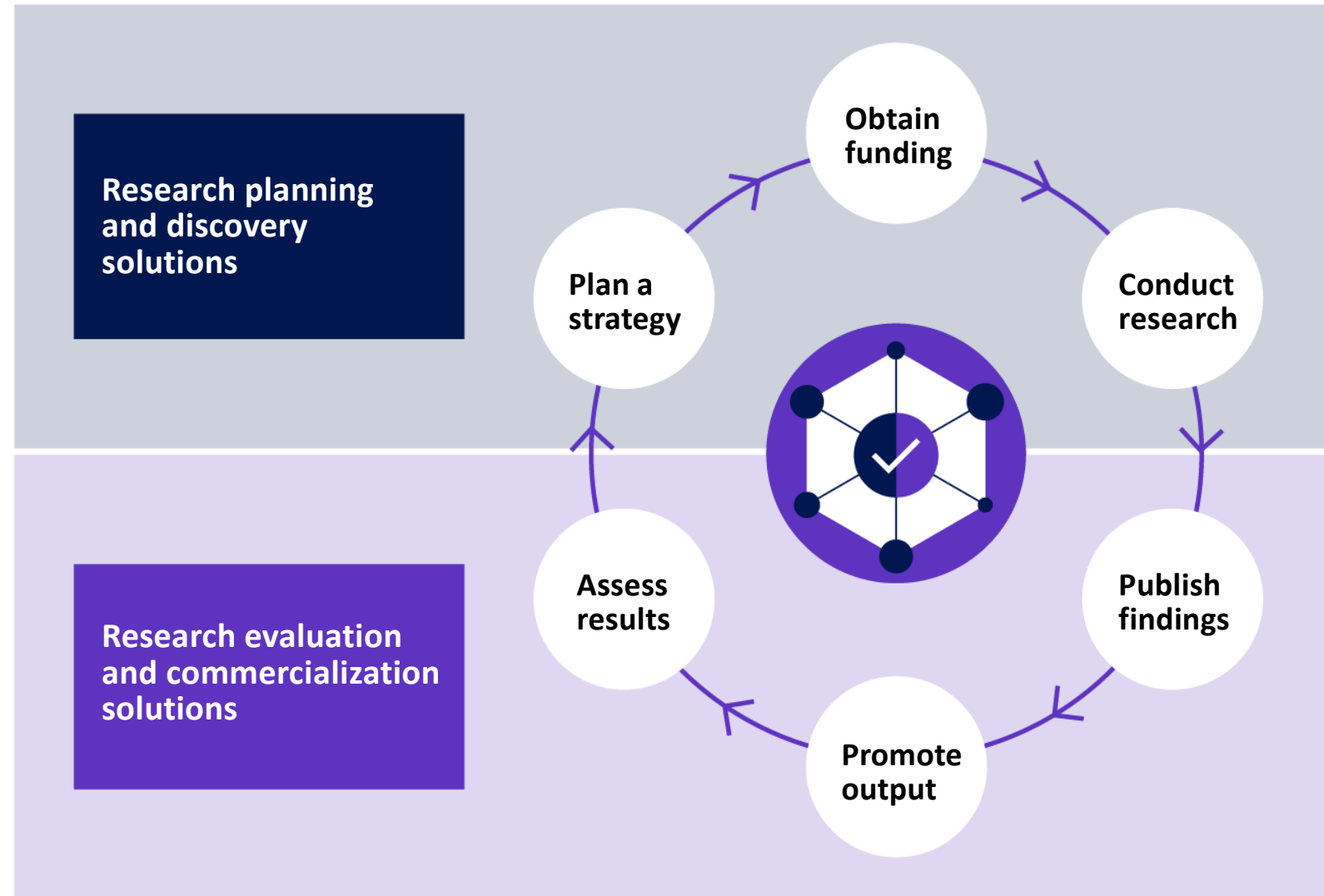
- One click access to millions of research papers

Bases de datos disponibles a través de la suscripción de FECYT

Herramientas gratuitas

Make confident, data-driven decisions throughout the research lifecycle

Connected data and solutions
for researchers, librarians and
university leaders





For questions, contact:

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