



Formación de Web of Science

Sesión D3 – Los Highly Cited Researchers y Research Fronts (Nivel Avanzado)

Anne Delgado 06/10/2023



Sesión D3 – Los Highly Cited Researchers y Research Fronts (Nivel Avanzado)

- ¿Qué es un Research Front?
- Lo que significa ser un Highly Cited Researcher
- Clarivate y sus programas de reconocimiento a los investigadores



Sesión D3 – Los Highly Cited Researchers y Research Fronts (Nivel Avanzado)

- ¿Qué es un Research Front?
- Lo que significa ser un Highly Cited Researcher
- Clarivate y sus programas de reconocimiento a los investigadores



¿Por qué Essential Science Indicators?

¿Su institución está produciendo investigaciones innovadoras?





Highly Cited papers

Artículos de los últimos diez años, que hayan alcanzado el umbral superior de citación del 1% para su año de publicación designado y disciplina.

Hot Papers

Artículos de los dos últimos años, que han alcanzado el umbral superior del 0,1% de citas. Esto indica un número excepcionalmente alto de citas poco después de la publicación.



Research Fronts

Artículos altamente citados que han sido co-citados, formando la vanguardia de la investigación actual en 22 disciplinas.

fue creada en 2001
para ayudarle a identificar
investigación de alto impacto
académico en la Colección
Principal de Web of Science.

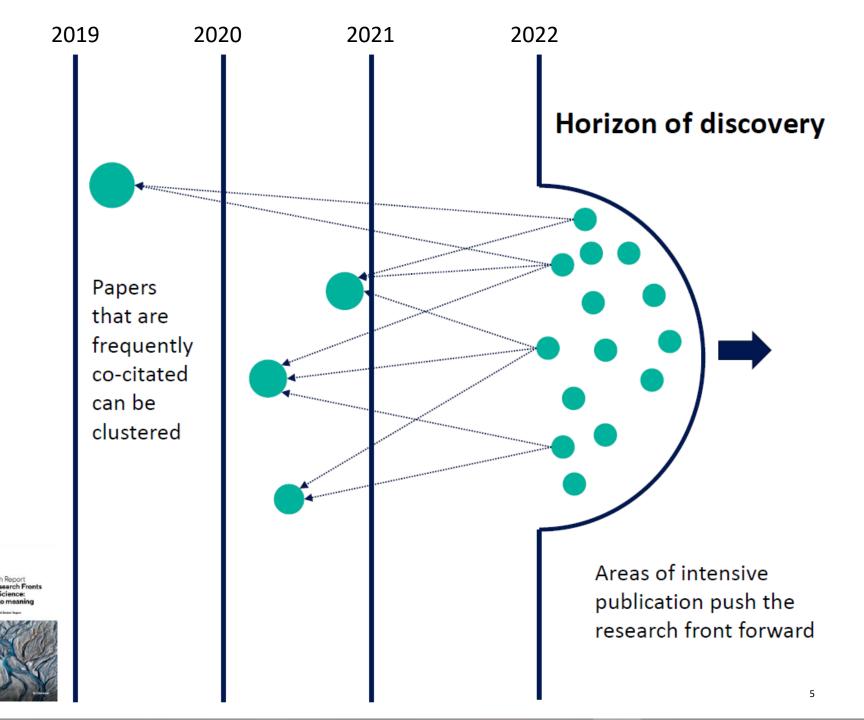
ESI analiza a más de 11.000
revistas de todo el mundo
para clasificar instituciones, países
y revistas en 22 amplias
disciplinas basándose en
el desempeño de las citas.



Research Fronts

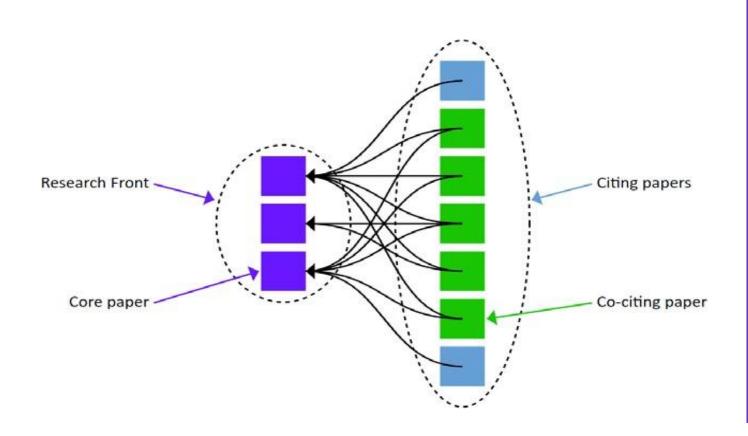
At the horizon, intensive publication activity can be detected and grouped according to the previous research that was cited (aka co-citation)

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





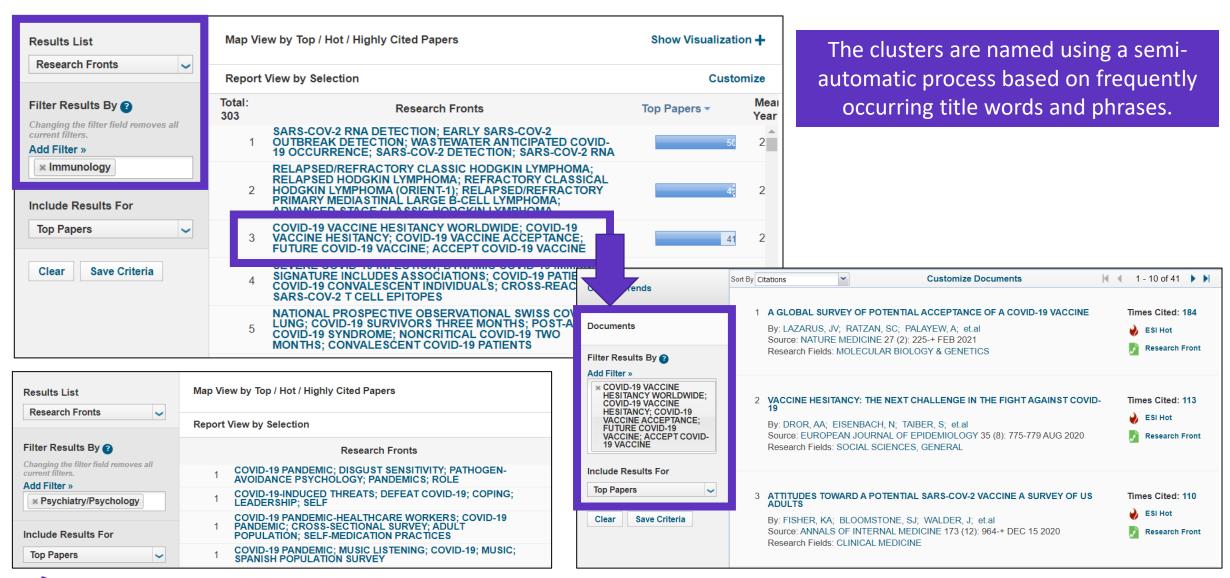
What is a Research Front?



- 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 cociting 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





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 ScienceTM to inform and improve your research assessment.



Sesión D3 – Los Highly Cited Researchers y Research Fronts (Nivel Avanzado)

- ¿Qué es un Research Front?
- Lo que significa ser un Highly Cited Researcher
- Clarivate y sus programas de reconocimiento a los investigadores



Highly Cited Researchers 2022

November 15, 2022

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



Share this article







DAVID PENDLEBURY

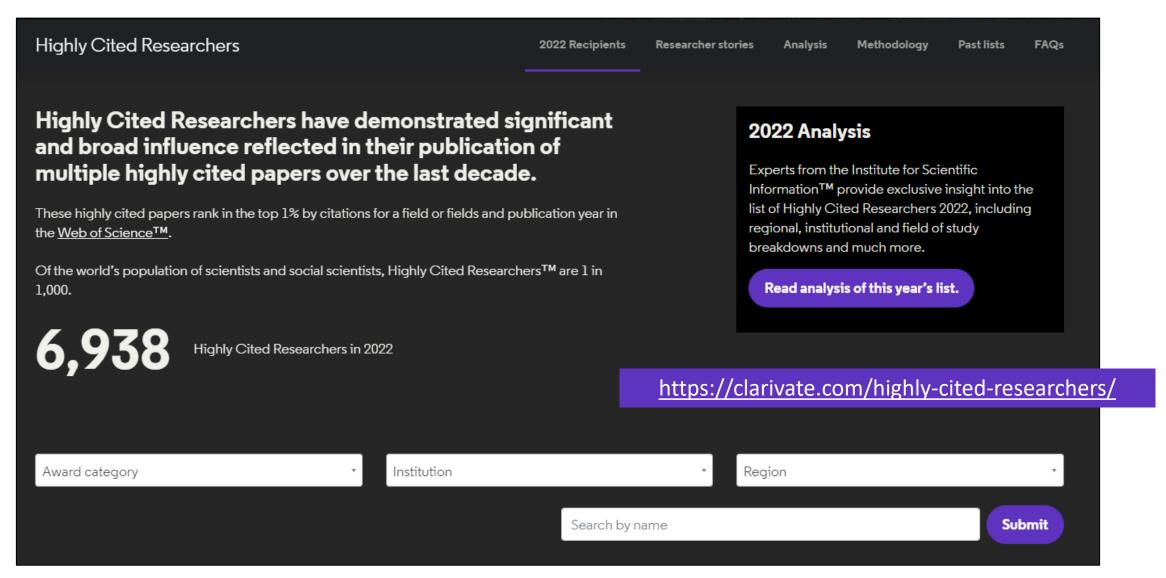
Head of Research Analysis at the Institute for Scientific Information Clarivate

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





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 CollectionTM 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 <u>Essential Science Indicators</u>TM (ESI), a component of <u>InCites</u>TM. 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

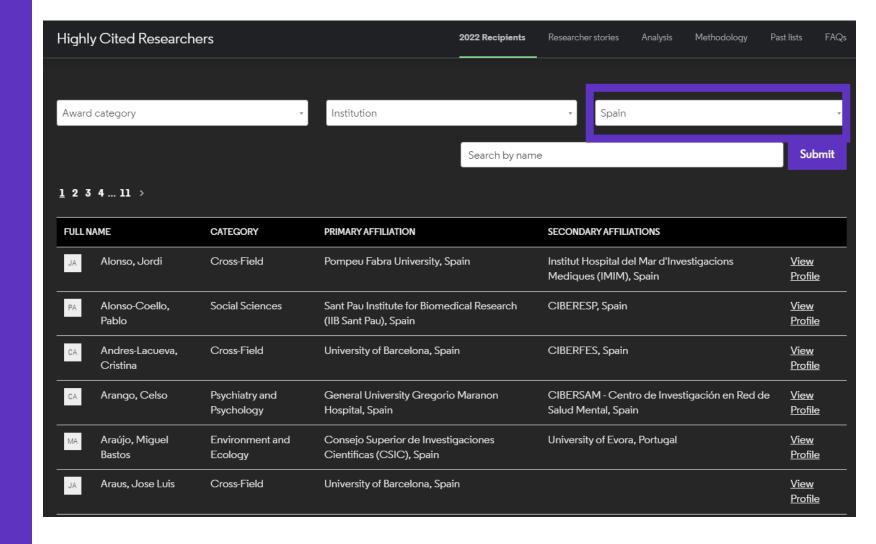


¿Que es un Autor altamente citado?

- Es un autor de artículos altamente citados, listado en la lista que publicamos cada año en Noviembre, desde 2002.
- Los artículos altamente citados son artículos o revisiones ubicados en el top 1% más citado en su categoría y año de publicación.
- Se establece la lista según 21 categorías (Essential Science Indicators) y desde 2018 se introdujo también la categoría "Cross Field".
- En cada disciplina existe un número mínimo de artículos altamente citados a obtener. Es en Clinical Medicine donde se requieren más y en Economía y Business menos.
 - Por defecto se descartan todos los artículos con más de 30 autores.
 - Artículos retractados o pruebas de mala conducta pueden eliminar un autor de la lista.
 - Nivel de autocitas más alto que lo normal.
 - Nivel de citas recibidas provienen por un 50% o más de co-autores.



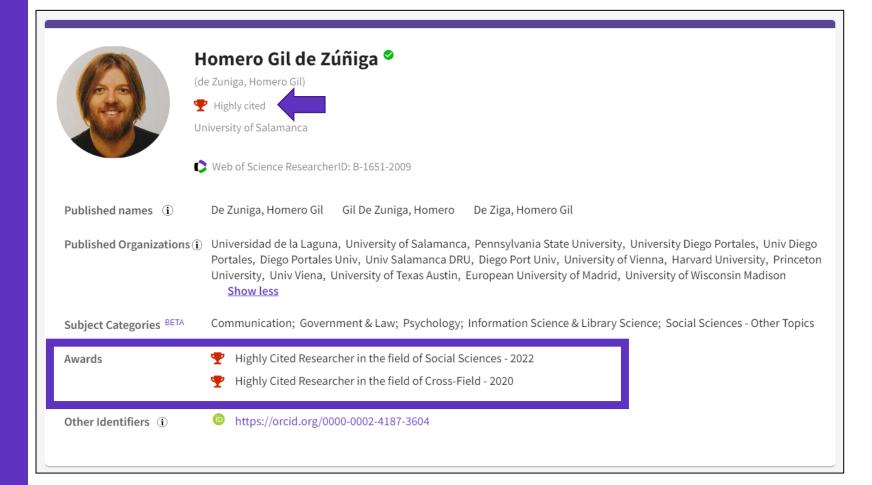
Highly Cited Researchers 2022





Highly Cited Researchers 2022

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





The news & Clarivate statement

SIRIO ACADEMIC Our Expertise Our Approach R&D Team Contact About Blo

Clarivate statement on Highly Cited Researcher affiliations

Share this article







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



Sesión D3 – Los Highly Cited Researchers y Research Fronts (Nivel Avanzado)

- ¿Qué es un Research Front?
- Lo que significa ser un Highly Cited Researcher
- Clarivate y sus programas de reconocimiento a los investigadores



Researcher Recognition https://clarivate.com/webofsciencegroup/researcher-recognition/

Highly Cited Researchers

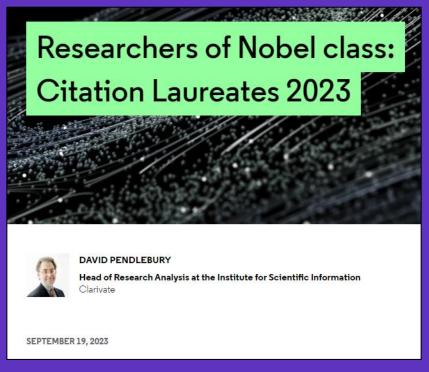
Of the world's scientists and social scientists, Highly Cited Researchers truly are one in 1,000. These pioneers in their fields represent the most influential researchers who have published multiple papers frequently cited by their peers that rank in the top 1% of citations for field and year in the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

Visit Highly Cited Researchers 2022





Citation Laureates explained





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.

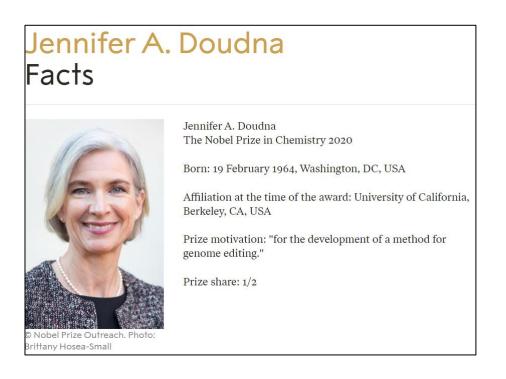
However, a high level of citation is only a prerequisite for selection on this prestigious list. While we say that citations at high frequency reflect contributions that have been influential in some way, we also maintain that citation data should be combined with qualitative information and human judgement.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





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.

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



Concluding the training



Programa

Sesiones de 1h30min = 60 min de formación teórica y práctica + 30 min para resolver las dudas

Curso articulado en 4 módulos – 15 sesiones – que abarcarán diferentes plataformas:

- Web of Science
- Journal Citation Reports
- Essential Science Indicators
- EndNote Click
- EndNote Online
- Master Journal List

| 15 SESIONES DE FORMACIÓN | Día | Hora |
|--|------------|-------------|
| Módulo A - Explorar la investigación sobre un tema con Web of Science | | |
| Sesión A1 – Empezar a trabajar con Web of Science (Nivel Elemental) | 18/09/2023 | 11:00-12:30 |
| Sesión A2 – Crear búsquedas complejas y encontrar textos completos (Nivel Intermedio) | 19/09/2023 | 14:00-15:30 |
| Sesión A3 – Guardar y exportar mi trabajo (Nivel Elemental) | 20/09/2023 | 11:00-12:30 |
| Sesión A4 – Estrategias para encontrar más información (Nivel Intermedio) | 21/09/2023 | 11:00-12:30 |
| Sesión A5 – Descubrir bibliografía relevante con la red de citas (Nivel Avanzado) | 22/09/2023 | 11:00-12:30 |
| Módulo B - Elegir una buena revista para publicar mi investigación | | |
| Sesión B1 – Gestionar mi bibliografía con EndNote Online (Nivel Elemental) | 25/09/2023 | 11:00-12:30 |
| Sesión B2 – Las revistas de la Colección Principal de Web of Science (Nivel Intermedio) | 26/09/2023 | 11:00-12:30 |
| Sesión B3 – Los fundamentos de Journal Citation Reports (Nivel Elemental) | 27/09/2023 | 11:00-12:30 |
| Sesión B4 – Utilizar todos los recursos de Journal Citation Reports (Nivel Avanzado) | 28/09/2023 | 11:00-12:30 |
| Módulo C - Crear mi perfil de investigador/a en Web of Science | | |
| Sesión C1 – Buscar las publicaciones de un/a autor/a (Nivel Elemental) | 29/09/2023 | 11:00-12:30 |
| Sesión C2 – Buscar y leer el perfil de un/a investigador/a (Nivel Intermedio) | 02/10/2023 | 11:00-12:30 |
| Sesión C3 – Crear y editar mi perfil de investigador/a (Nivel Avanzado) | 03/10/2023 | 11:00-12:30 |
| Módulo D - Estudiar el impacto académico de las publicaciones | | |
| Sesión D1 – Buscar y analizar las publicaciones de una institución (Nivel Avanzado) | 04/10/2023 | 11:00-12:30 |
| Sesión D2 – Los artículos más citados en Essential Science Indicators (Nivel Intermedio) | 05/10/2023 | 11:00-12:30 |
| Sesión D3 – Los Highly Cited Researchers y Research Fronts (Nivel Avanzado) | 06/10/2023 | 11:00-12:30 |



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

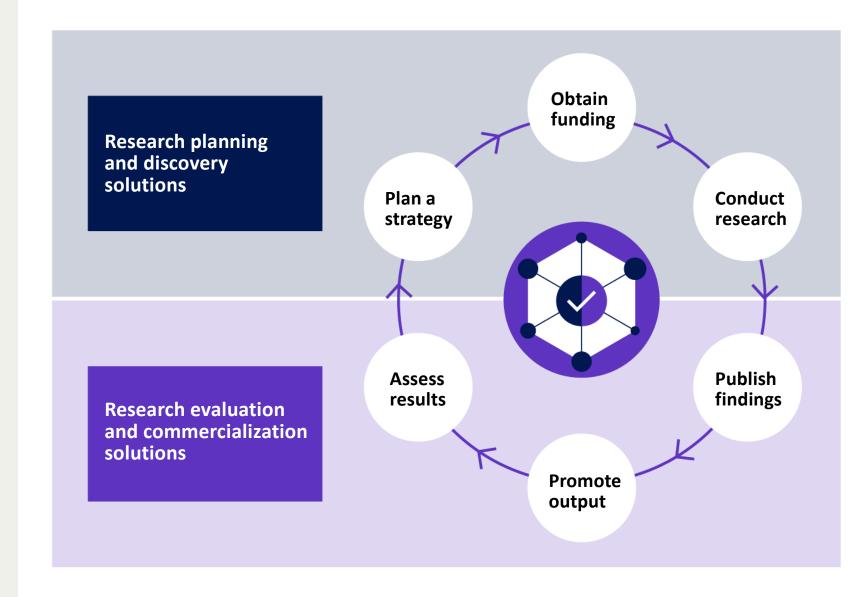
 One click access to millions of research papers Bases de datos disponibles a través de la suscripción de FECYT

Herramientas gratuitas



Make confident, data-driven decisions throughout the research lifecycle

Connected data and solutions for researchers, librarians and university leaders







Para cualquier pregunta relacionada con el funcionamiento de las herramientas, por favor contacte con los servicios de su biblioteca o bien con WoSG.support@clarivate.com





Para cualquier pregunta relacionada con la formación o el acceso a las herramientas, por favor contacte con recursoscientificos@fecyt.es

