



Web of Science

## Web of Science Core Collection

### Descriptive Document

## REVISION HISTORY

Name	Date	version	Summary of changes
Massimiliano Carloni	02/04/2016	0.1	First draft version
Tihomir Tsenkulovsky	04/01/2016	1.0	Comments and revision
Massimiliano Carloni	04/05/2016	1.1	Revised version
Rachel Mangan	23/10/2018	2.0	Updated version

## REVIEW HISTORY

Reviewer Name	Doc Version Reviewed	Date Sent for review	Date Review Filed	Approved/Rejected (with Reasons)

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## PREFACE

Web of Science™ Core Collection is an abstract and citation database which serves as the premier resource for research discovery, covering authoritative and multidisciplinary content, such as 20,000 of the highest impact journals worldwide, including open access journals, 90,000 scholarly books and over 170,000 conference titles.

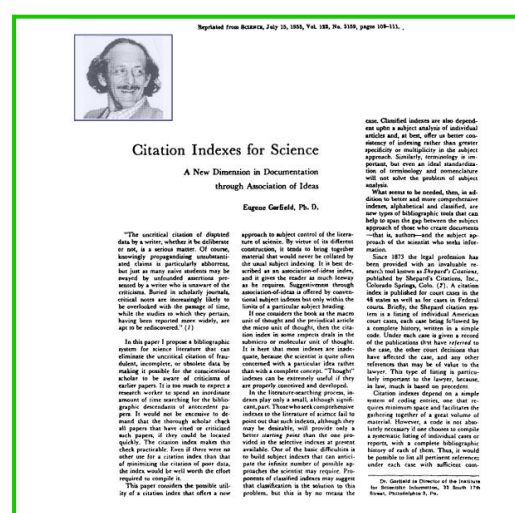
Web of Science™ Core Collection provides a retrospective coverage in the sciences, social sciences, arts, and humanities, dating back to 1900.

Since its inception, the Web of Science™ Core Collection has remained consistent in the following areas:

1. Coverage must be comprehensive but not all-inclusive, content selection process being characterized as **highly selective**.
2. **Every issue** of any covered journal is indexed with no content gaps.
3. **Every item** of any published issue is indexed.
4. **All authors** in a published paper are captured and receive “full credit”, whether listed first or last in the publication.
5. **All affiliations** (institutions) in a published paper are captured, regardless of the quantity.
6. **Every cited reference** is indexed whether it refers to a covered source or to a source that is not covered.

## OUR HISTORY

The origins of a citation index began in 1955 with the publishing of a groundbreaking paper in the journal **Science** by **Eugene Garfield**.



This innovative paper envisaged some of the key aspects of a modern citation database:

- “In this paper I propose a bibliographic system for science literature that can eliminate the **uncritical citation of fraudulent, incomplete, or obsolete data.....**”
- “.....By virtue of its different construction, it tends to bring together material that would never be collated by the usual subject indexing. It is best described by an **association of ideas index....**”

- “....It’s here that most indexes are inadequate, because the scientist is quite often concerned with a particular idea rather than with a **complete concept...**”

Garfield understood that **through citation, an intellectual link is created between research works**. Traditionally, indexing was done within each scientific discipline and **researchers were not finding all relevant information**. Building a multidisciplinary, citation database, enabled researchers to expedite their research process along with evaluate the impact of their work and identify scientific trends.

This seminal paper also paved the way to the design of a highly selective index: **“however, not all of these 50,000 publications are being covered in our present indexing activities, and yet this has not prevented us from continuing indexes of standard type or from starting new ones. Lack of complete coverage is not necessarily an argument against a citation index. It’s in fact an argument in its favour”**

A concept (the so called “Garfield’s law of concentration”), states that **the tail of the literature of one discipline consists, in large part, of the cores of the literature of other disciplines** and having as an effect that **“a relative small number of journals account for the bulk of what is published and what is cited”**.

This law was indeed referring to the “Bradford’s law of scattering” stating that **“Articles of interest to a specialist must occur not only in the periodicals specializing in his subject, but also from time to time, in other periodicals, which grow in number as the relation of their fields to that of the subject lessens, and the number of articles on his subject in each periodical diminishes”**.

Three years later, in July 1958, Eugene Garfield laid the foundations for ISI (**Institute for Scientific Information**) by borrowing \$500 from Household Finance. He hired his first full-time employee (**Beverly Bartolomeo**, that started a 47-year career began as Dr. Garfield’s secretary, and just ended in April 2005 with her retirement as Senior Director, Database Publishing Management) and began to build an organization that included more than 500 people when it was acquired by The Thomson Corporation in 1992.



In the early 1960s, Eugene Garfield developed two pilot projects that would test the viability and efficiency of citation indexing. The first project involved the creation of a database that would index the citations of 5,000 chemical patents held by two private pharmaceutical companies. Based on this investigation and analysis, Garfield proved that citation indexing permitted the retrieval of relevant literature across arbitrary classifications in a way that subject-oriented indexing could not.

A second pilot project in 1962 involved Garfield's enterprise, the Institute for Scientific Information, with the United States National Institutes of Health in building an index to the published literature on genetics. Three databases were built to cover the literature over 1 year, 5 years and 14 years with a varying number of source publications indexed in each. While this project was to test the feasibility and utility of a narrow, discipline-oriented citation index, at completion, it was concluded that the database with the most broadly based set of source publications formed the most comprehensive and useful guide to the published literature in the field of genetics.

In **1964**, almost 10 years after making his proposal and several projects, Garfield introduced the first **Science Citation Index** as a five-volume print edition indexing 613 journals and 1.4 million citations. Two years later, Science Citation Index became available on magnetic tape.

In **1965** Garfield proposed the first metric to measure the impact of a journal. This metric would later become known as the “**journal impact factor**” and is still the most widely used and metric to measure journal impact. Journal impact factor has become the de facto industry standard since its commercial appearance on Journal Citation Reports, in **1975**.

In **1988**, the Science Citation Index was made available on CR-ROM and in **1997** it became part of a web environment, named the **Web of Science**. In 1992 the Institute for Scientific Information was acquired by Thomson, who later merged with Reuters in 2008 to operate as Clarivate Analytics.

In **2001**, Web of Science was incorporated with other databases into a platform named **Web of Knowledge**.

In **2014**, the newly redesigned platform: the **Web of Science** platform succeeded the former Web of Knowledge with the former Web of Science database being given its current name, **Web of Science Core Collection**

In **2016**, Clarivate Analytics sold the Intellectual Property and Science (IP&S) business and from this separation merged an independent company, **Clarivate Analytics**.

**Clarivate Analytics** has the bold mission of accelerating the pace of innovation. Clarivate is committed to providing first class content, trusted analytics and technology driven and innovative tools in order to meet the needs of the customer.

In **2017** Clarivate Analytics acquires Publons, creator of the leading online global peer-review platform. Publons was founded with “the core belief that peer review is at the heart of research and that it needs to be recognized as such”.

The joining of Publons and Clarivate brings together the world’s preeminent citation database and the world’s largest researcher-facing peer-review data and recognition platform – a combination we believe will help address these pressing industry challenges.

In **2018** Clarivate Analytics announced the acquisition of **Kopernio**. Kopernio is an A.I technology start up business that has developed an innovative technology that revolutionises how researchers access articles across the globe.

Clarivate Analytics and Kopernio have a shared vision: to streamline the process of scientific discovery and to develop innovative industry-leading products that make the world of research more accessible.

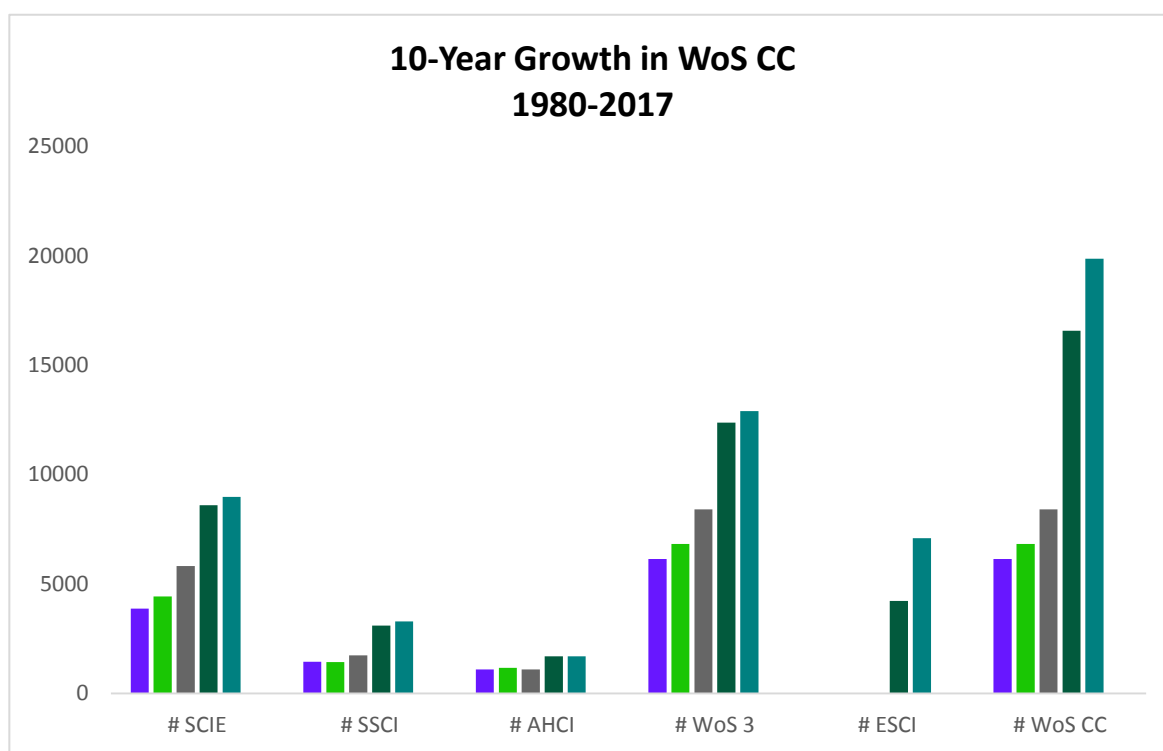
## CONTENT

Web of Science™ Core Collection, currently includes **journals**, **books** and **conference proceedings**.

## CURRENT DATA

There are currently **20,396<sup>1</sup> journals** fully indexed in the Web of Science™ Core Collection, covering 252 subject categories that span the life sciences, physical sciences, health sciences, social sciences, arts, and humanities. See in the graph below to view the growth in the number of journals since the creation of Web of Science.

- **3,832<sup>2</sup> journals** within the Web of Science Core Collection are currently classified as Gold Open Access (DOAJ)
- **11,149 journals** are currently covered in 2017 Journal Citation Report edition.
- Web of Science™ Core Collection indexes **94,066<sup>3</sup> books**, from all major publishers and societies, including a large number of University presses.
- **>197,792<sup>4</sup> unique conference titles** (totalling **10,443,486<sup>5</sup> records**) are indexed within the Web of Science™ Core Collection.



<sup>1</sup> July 2018

<sup>2</sup> July 2018 – 2,516 (52%) in ESCI

<sup>3</sup> July 2018

<sup>4</sup> July 2018

<sup>5</sup> August 2018

## INDEXES

The Web of Science™ Core Collection currently indexes **72,254,259**<sup>6</sup> bibliographic records, split in six main citation indexes:

- Science Citation Index Expanded<sup>7</sup> (**SCIE**): created as SCI in **1964** and now indexing **9,046** journals showing data from **1900** to present with complete **cited references**.
- Social Sciences Citation Index (**SSCI**): created in **1973** and now indexing **3,330** journals showing data from **1900** to present with complete **cited references**.
- Arts & Humanities Citation Index (**AHCI**): created in **1978** and now indexing **1,815** journals showing data from **1975** to present with **full cited references** including implicit citations (citations to works found in the body text of articles and not included in the bibliography, e.g., works of art).
- Emerging Sources Citation Index (**ESCI**): created in **2015**, now indexing **7,280**<sup>8</sup> journals from **2005** to present with **complete cited references**.
- Conference Proceedings Citation Index (**CPCI**): created in **2008** (formerly known as ISI Proceedings) indexing conferences from **1990** to present are indexed within two main sub-indexes:
  - Conference Proceedings Citation Index – Science (CPCI-S)
  - Conference Proceedings Citation Index – Social Sciences and Humanities (CPCI-SSH)
- Book Citation Index (**BKCI**): created in **2011** and currently indexing books from **2005** to present within two main sub-indexes:
  - Book Citation Index – Science BkCI-S)
  - Book Citation Index – Social Sciences and Humanities (BkCI-SSH)

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<sup>6</sup> October 2018

<sup>7</sup> The Science Citation Index Expanded was the name given to the web version of the Science Citation Index that remained a database available only on CD-Rom/Diskette.

<sup>8</sup> Titles indexed in August 2018.

Index	Year Established	Data Type	Depth	Number of Titles
SCI-E	1964	Journals	1900	9,046
SSCI	1973	Journals	1900	3,330
AHCI	1978	Journals	1975	1,815
ESCI	2015	Journals	2005	7,280
CPCI	2008	Proceedings	1990	197,792
BKCI	2011	Books	2005	94,066

Two subject specific chemistry indexes are also part of the Web of Science™ Core Collection:

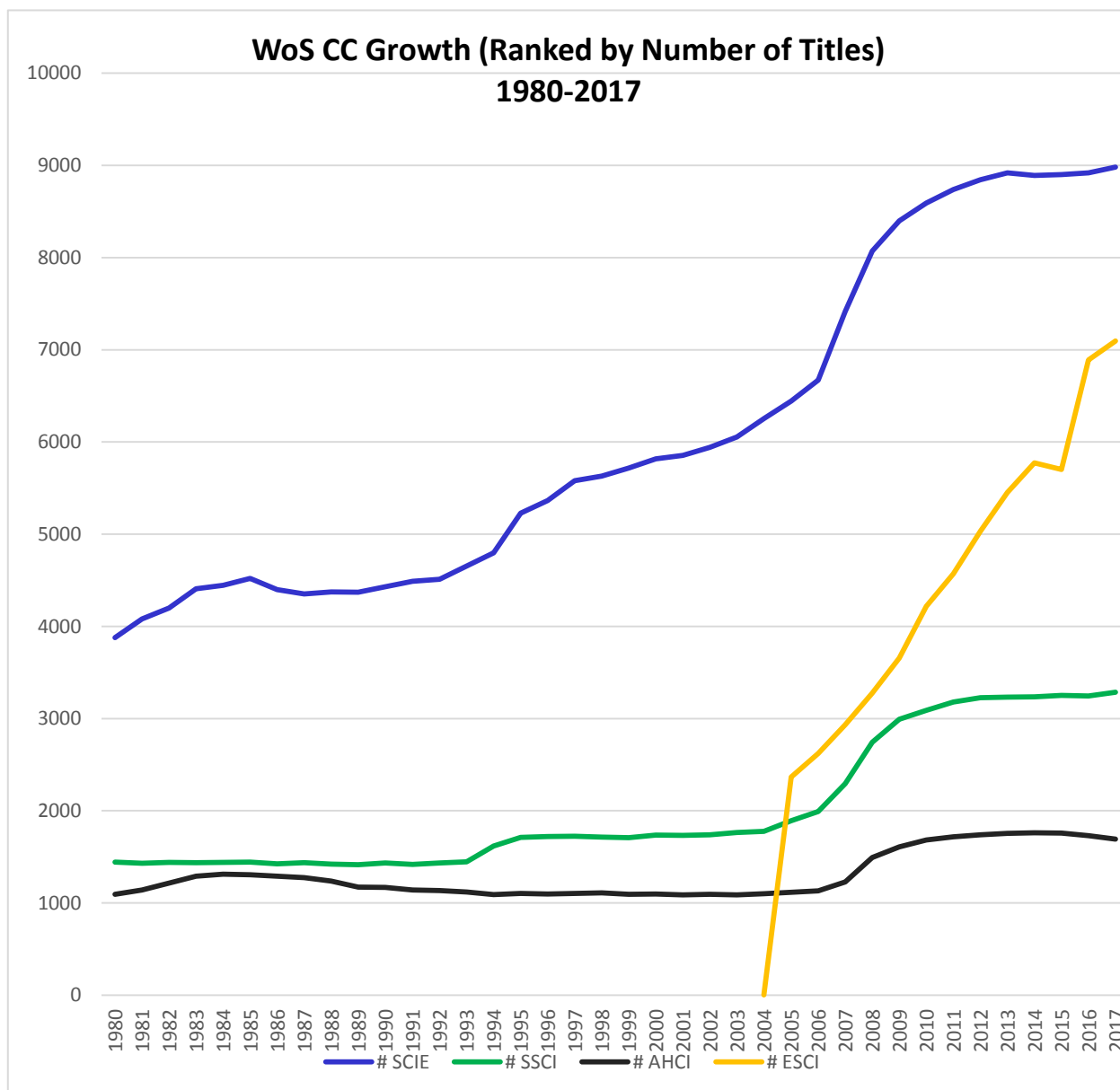
- **Current Chemical Reactions (CCR-Expanded):** indexing more than 350 chemistry journals and worldwide patents (plus INPI- Institut National de la Propriete Industrielle Institute National de la Propriete Industrielle archives from 1840) from 1985 to present, to search over 1 million reactions.
- **Index Chemicus (IC):** indexing 120 organic chemistry journals from 1993 to present, to search over 2.6m compounds.

Each Index can be selected (or deselected) for each search, in the main page of Web of Science™ Core Collection, under the “more settings” menu window:

The screenshot displays the Web of Science Core Collection search interface. At the top, there is a dropdown menu for 'Select a database' set to 'Web of Science Core Collection' and a 'Learn More' link. Below this are tabs for 'Basic Search', 'Cited Reference Search', 'Advanced Search', and '+ More'. The 'Basic Search' tab is active, showing a search bar with '1990-2019' and a 'Year Published' dropdown. A 'Search' button and 'Search tips' link are also present. Below the search bar is a 'Timespan' dropdown set to 'All years (1900 - 2018)'. A red box highlights the 'More settings' link. To the right of the 'More settings' link are options for 'Auto-suggest publication names' (set to 'On') and 'Default Number of Search Fields to Display' (set to '1 field (Topic)'). Below these are links to 'sign in or register.' and a note '(To save these permanently, sign in or register.)'. The 'More settings' menu is open, showing a list of indexes with checkboxes: 'Web of Science Core Collection: Citation Indexes' (including SCI-Expanded, SSCI, AH&CI, CPCI-S, CPCI-SSH, BKCI-S, BKCI-SSH, and ESCI) and 'Web of Science Core Collection: Chemical Indexes' (including CCR-Expanded and Index Chemicus).



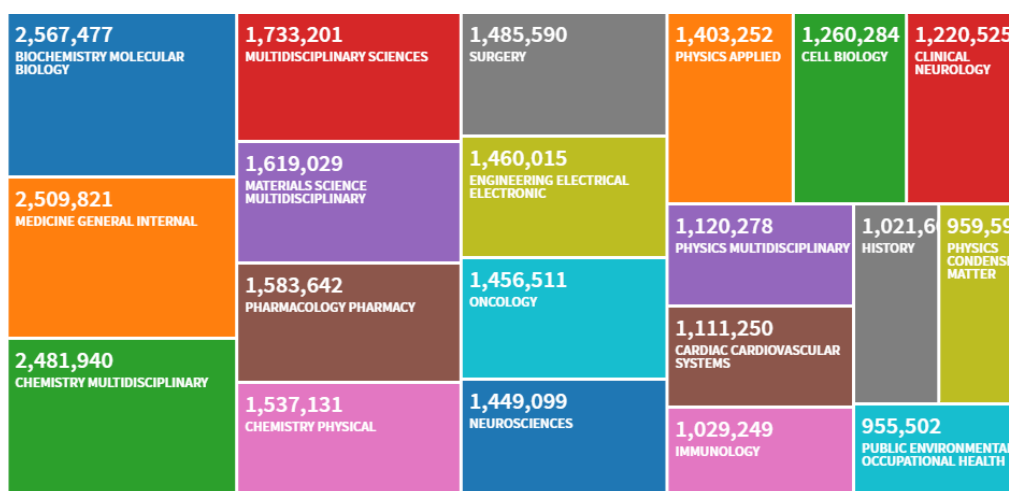
## GROWTH OF WEB OF SCIENCE CORE COLLECION 1980-2017



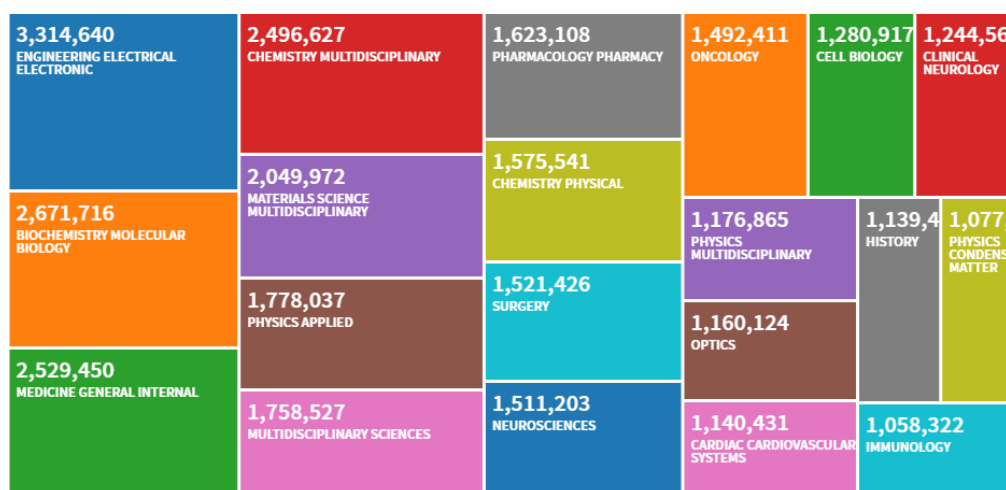
## SUBJECT COVERAGE

Web of Science™ Core Collection content is comprised of **252** so-called **tASCA** (traditional ASCA - American School Counselor Association) **categories**. This is a journal level categorization (each journal can be linked to one or more categories) and it has been mapped at the eASCA (Extended ASCA) category level (based on Research Areas and used in the “All Database environment<sup>9</sup>”). Full list (with code) of the tASCA categories and mapping with eASCA are located in Appendix A within this document.

**Top 20 Web of Science categories** based on the number of records in the following JOURNAL indexes (SCI-E, SSCI, AHCI, ESCI)<sup>10</sup>



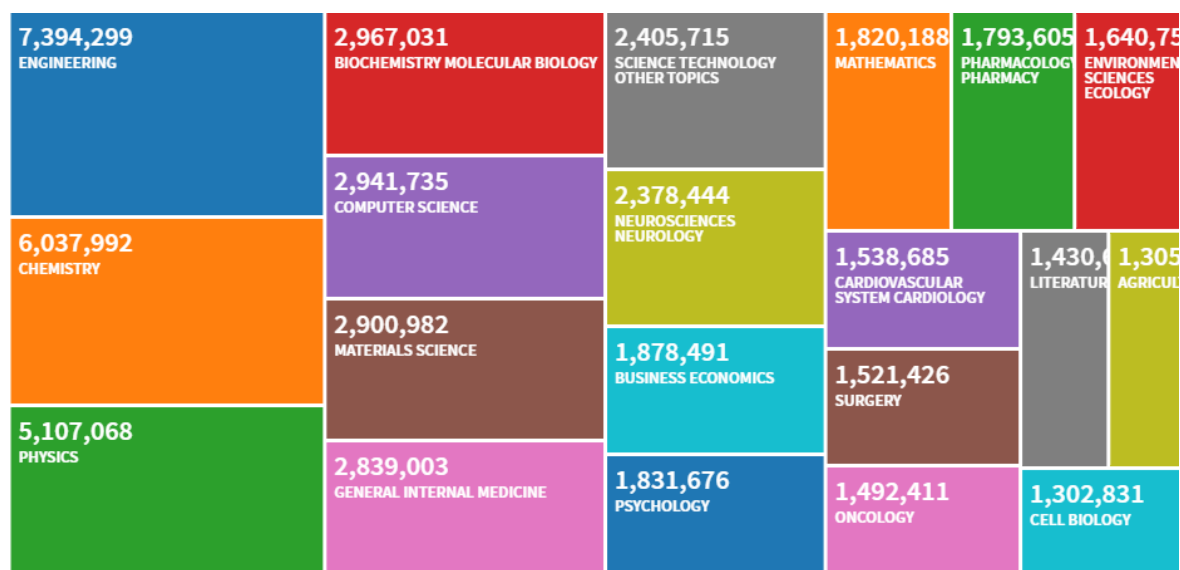
**Top 20 Web of Science Categories** based on the number of records, with respect to **all indexes** (SCI-E, SSCI, AHCI, ESCI, BKCI, CPCJ)<sup>11</sup>.



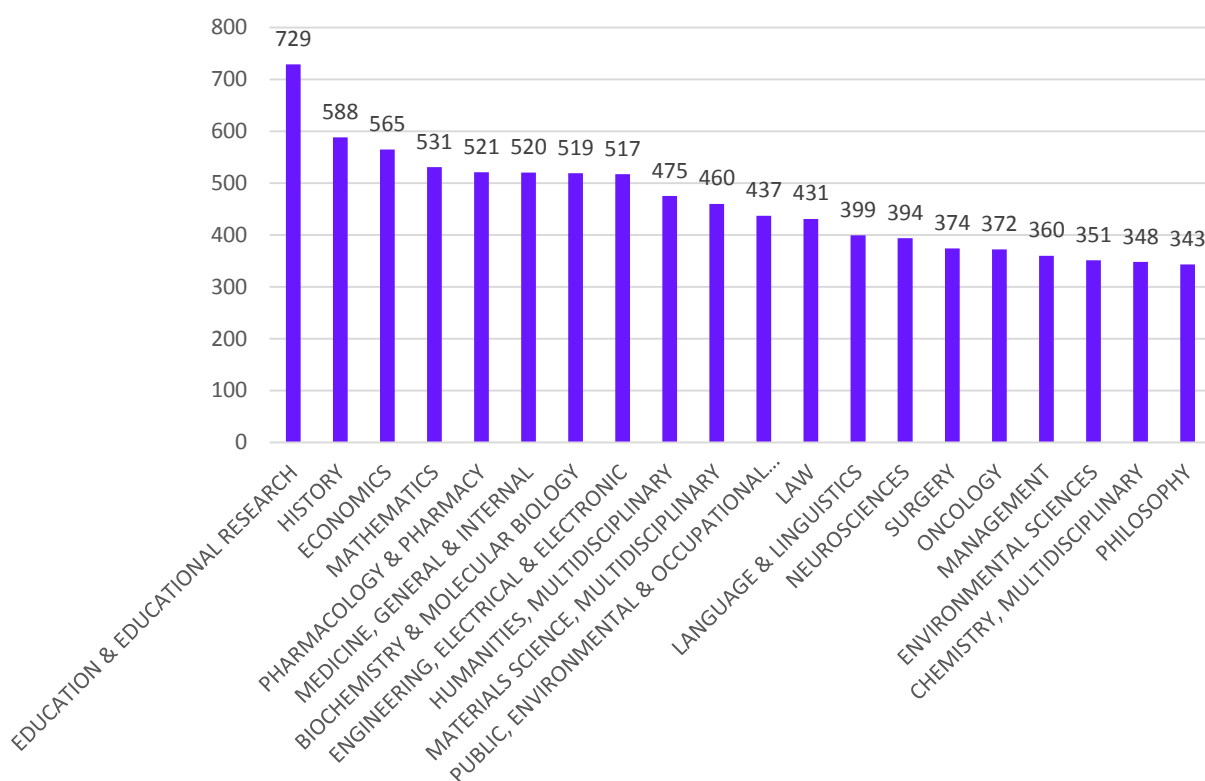
<sup>9</sup> Indexing Backbone

<sup>10</sup> August 2018

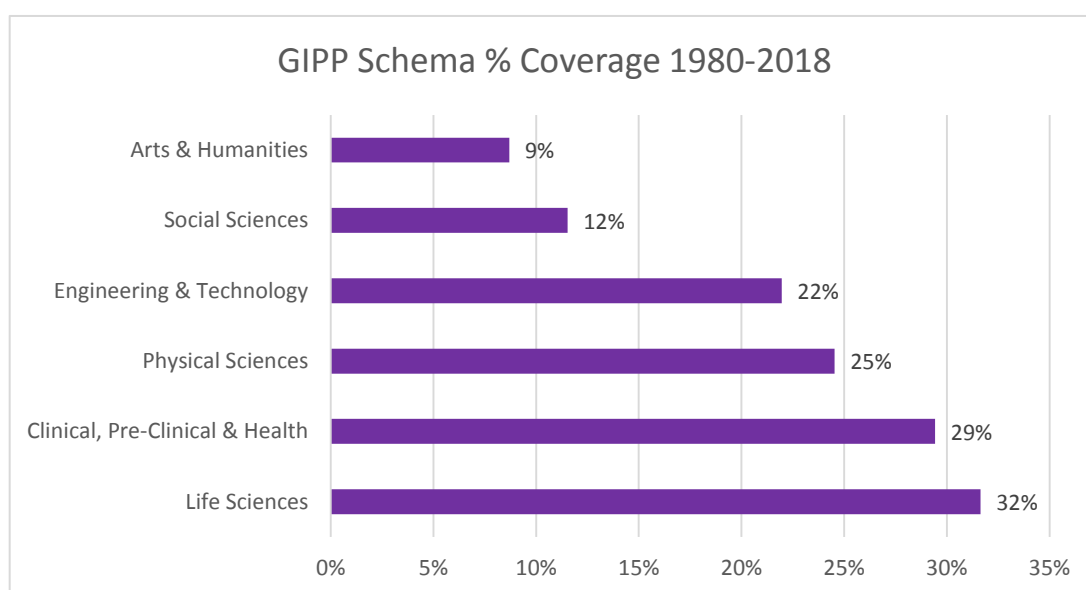
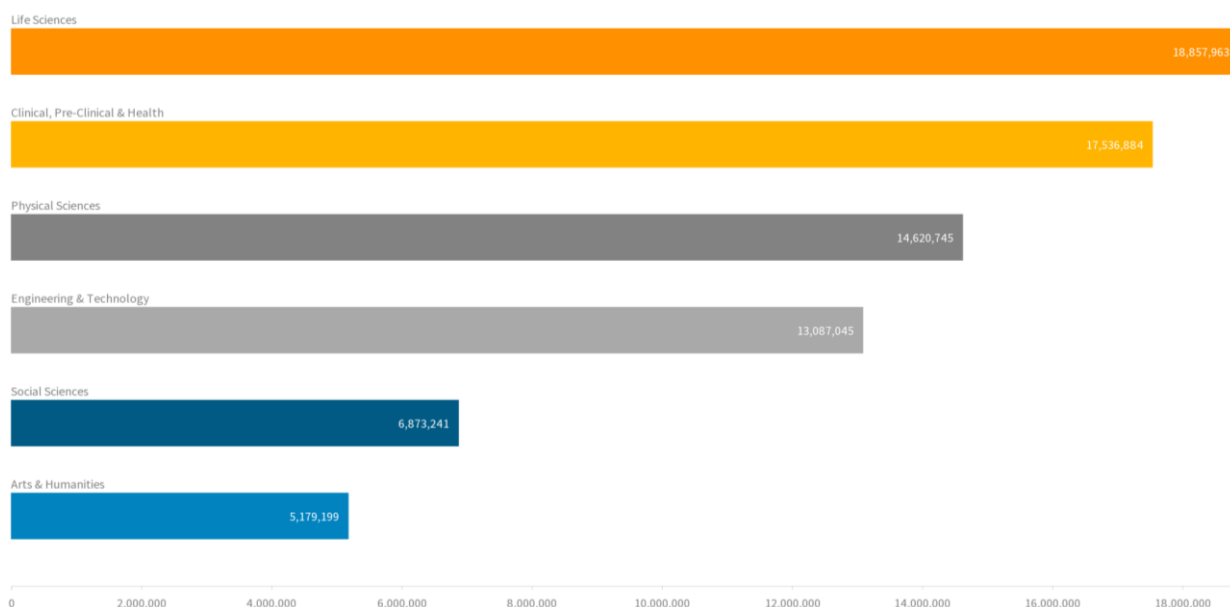
Top 20 Web of Science “Research Areas” (the broadest categorization available) based on the number of records with respect to all indexes (SCI-E, SSCI, AHCI, ESCI, BkCI, CPCI)<sup>11</sup>:



**Top 20 Web of Science Categories as measured by the number of Journal Titles in Category (2018)**

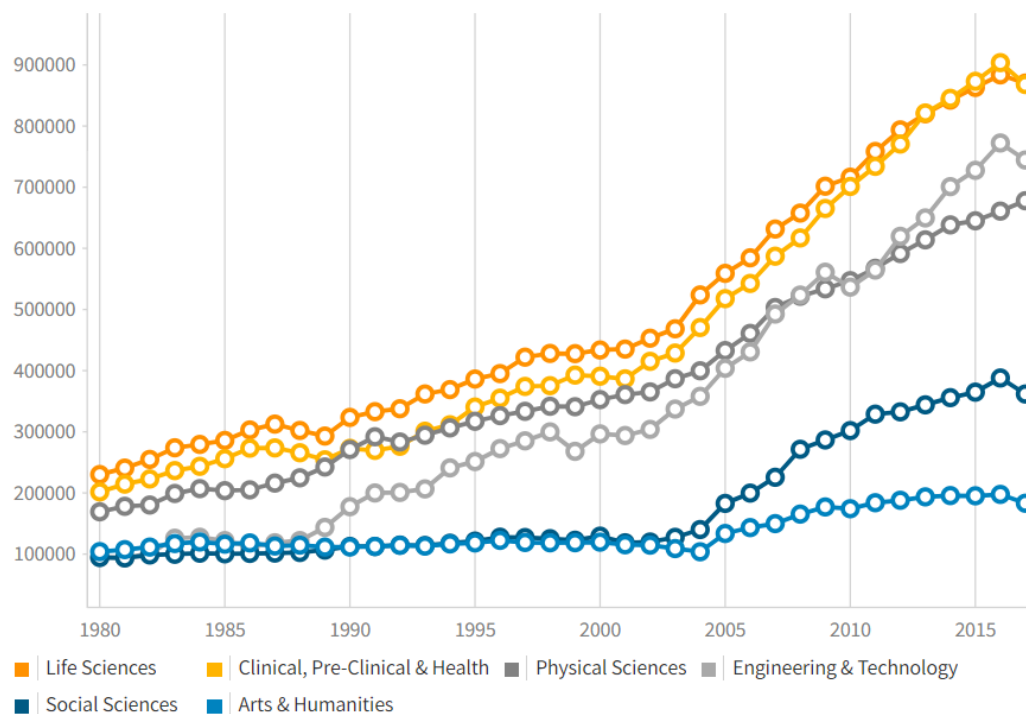


Total records and Percentage for common subject disciplines (**GI**PP- **G**lobal **I**nstitution **P**rofiles **P**roject areas) and for publication years **1980-2018**<sup>11</sup> are displayed below:



<sup>11</sup> Powered by Incites, the analytical platform based on WoS-CC data

Trend of publication<sup>12</sup> (1980-2017) for common subject disciplines within the (GIPP):



For a list of the number of journals indexed in the different categories between 1900 to 2018 see Appendix C.

**Top 25 Web of Science Categories** based on the number of records within the **Book Citation Index 2005-2018**:

<b>Web of Science Categories</b>	<b>Records</b>	<b>% of 13,517,11</b>
<b>HISTORY</b>	97983	7.25
<b>POLITICAL SCIENCE</b>	95014	7.03
<b>EDUCATION EDUCATIONAL RESEARCH</b>	74736	5.53
<b>ECONOMICS</b>	69417	5.14
<b>LITERARY THEORY CRITICISM</b>	52538	3.89
<b>RELIGION</b>	52504	3.88
<b>LAW</b>	50604	3.74
<b>BIOCHEMISTRY MOLECULAR BIOLOGY</b>	43491	3.22
<b>INTERNATIONAL RELATIONS</b>	41405	3.06
<b>PHILOSOPHY</b>	41244	3.05
<b>MANAGEMENT</b>	40410	2.99
<b>BUSINESS</b>	39625	2.93
<b>SOCIOLOGY</b>	39438	2.92
<b>ENGINEERING ELECTRICAL ELECTRONIC</b>	30123	2.23
<b>SOCIAL SCIENCES INTERDISCIPLINARY</b>	29985	2.22
<b>ENVIRONMENTAL STUDIES</b>	27560	2.04
<b>LANGUAGE LINGUISTICS</b>	26688	1.97
<b>BIOCHEMICAL RESEARCH METHODS</b>	25850	1.91
<b>HISTORY PHILOSOPHY OF SCIENCE</b>	24394	1.81
<b>COMPUTER SCIENCE ARTIFICIAL INTELLIGENCE</b>	22565	1.67
<b>LINGUISTICS</b>	22486	1.66
<b>COMMUNICATION</b>	22441	1.66
<b>BUSINESS FINANCE</b>	22328	1.65
<b>LITERATURE</b>	22114	1.64
<b>CULTURAL STUDIES</b>	21572	1.60

**Top 25 Web of Science Categories** based on the number of records within the **Conference Proceedings Citation Index 1990-2018<sup>12</sup>**:

Web of Science Categories	Records	% of 10,348,272
ENGINEERING ELECTRICAL ELECTRONIC	1937557	18.72
COMPUTER SCIENCE THEORY METHODS	698003	6.75
COMPUTER SCIENCE ARTIFICIAL INTELLIGENCE	654198	6.32
MATERIALS SCIENCE MULTIDISCIPLINARY	602051	5.82
PHYSICS APPLIED	572622	5.53
OPTICS	527708	5.10
TELECOMMUNICATIONS	526597	5.09
COMPUTER SCIENCE INFORMATION SYSTEMS	507931	4.91
ENGINEERING MECHANICAL	361371	3.49
AUTOMATION CONTROL SYSTEMS	357965	3.46
COMPUTER SCIENCE INTERDISCIPLINARY APPLICATIONS	328674	3.18
BIOCHEMISTRY MOLECULAR BIOLOGY	276905	2.68
ONCOLOGY	275844	2.67
PHYSICS CONDENSED MATTER	265293	2.56
COMPUTER SCIENCE SOFTWARE ENGINEERING	263649	2.55
CLINICAL NEUROLOGY	260552	2.52
NEUROSCIENCES	255784	2.47
INSTRUMENTS INSTRUMENTATION	247294	2.39
COMPUTER SCIENCE HARDWARE ARCHITECTURE	242808	2.35
SURGERY	231894	2.24
ENERGY FUELS	231720	2.24
CHEMISTRY MULTIDISCIPLINARY	224299	2.17
CARDIAC CARDIOVASCULAR SYSTEMS	218784	2.11
IMAGING SCIENCE PHOTOGRAPHIC TECHNOLOGY	194714	1.88
IMMUNOLOGY	192609	1.86

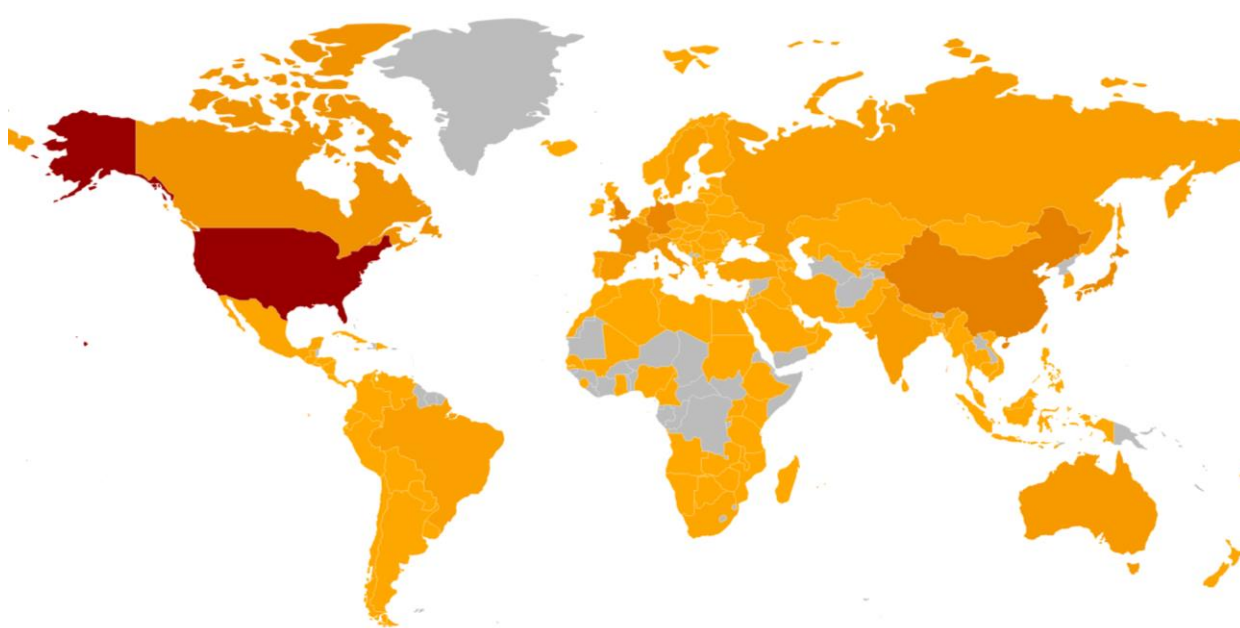
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<sup>12</sup> August 2018

## COUNTRY COVERAGE

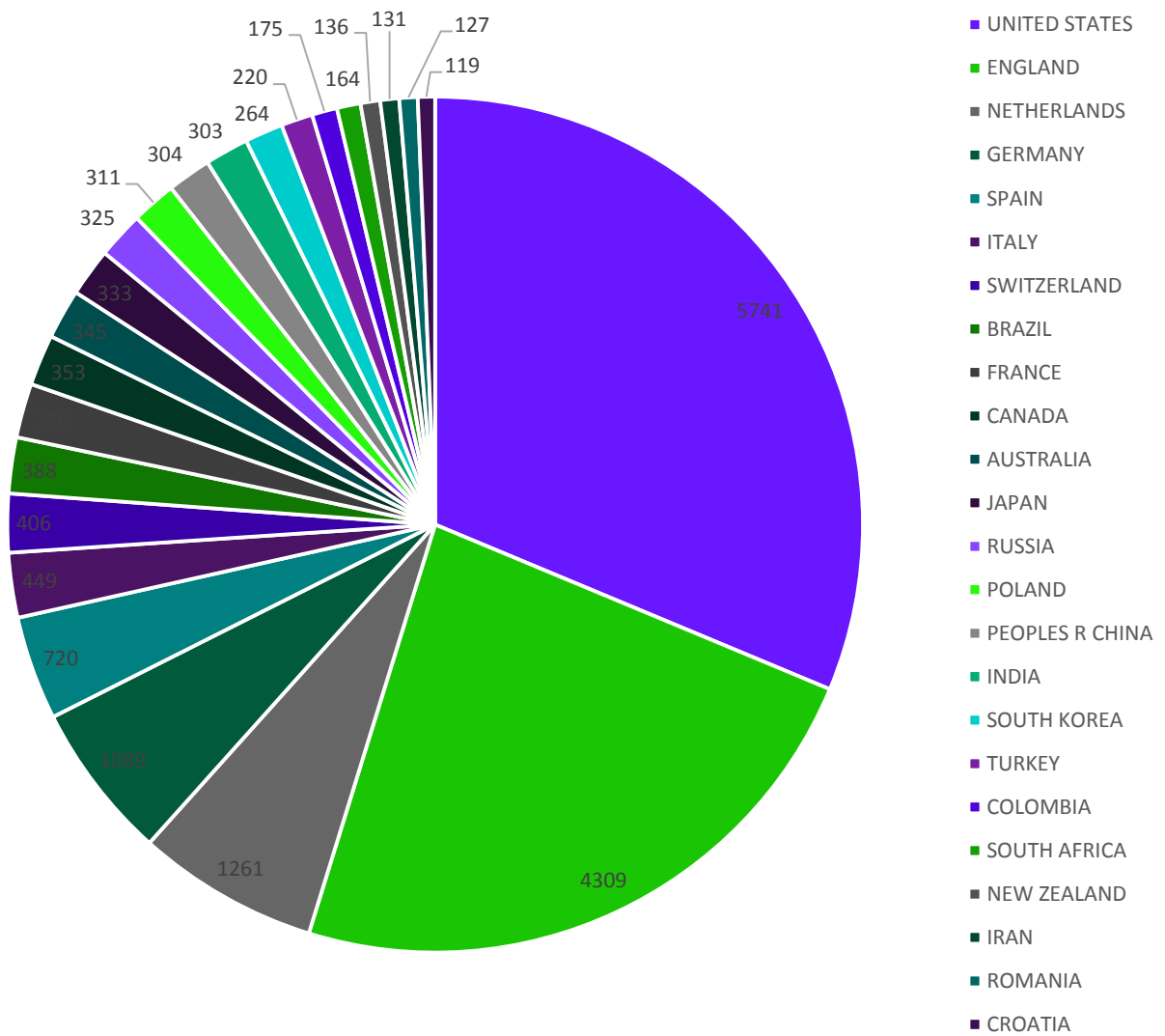
In recent years, the Web of Science™ Core Collection has witnessed a flood of original research issuing from around the globe. In an effort to appeal to a larger global research audience, the Web of Science Core Collection has expanded beyond publishers located in North America and Western Europe, providing a wider international research community.

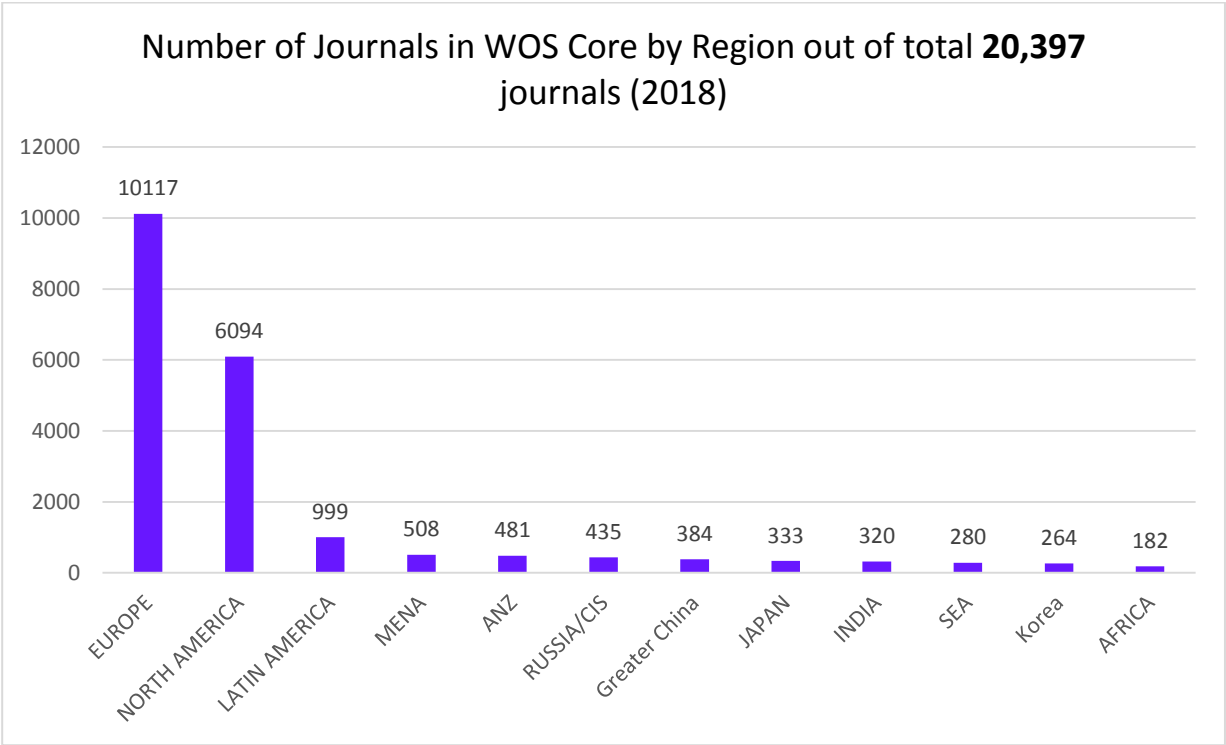
Whether it is research in the natural sciences, social sciences or arts & humanities, there has been a dramatic increase of emerging research content from publishers across the world which is now available to subscribers of the Web of Science Core Collection.



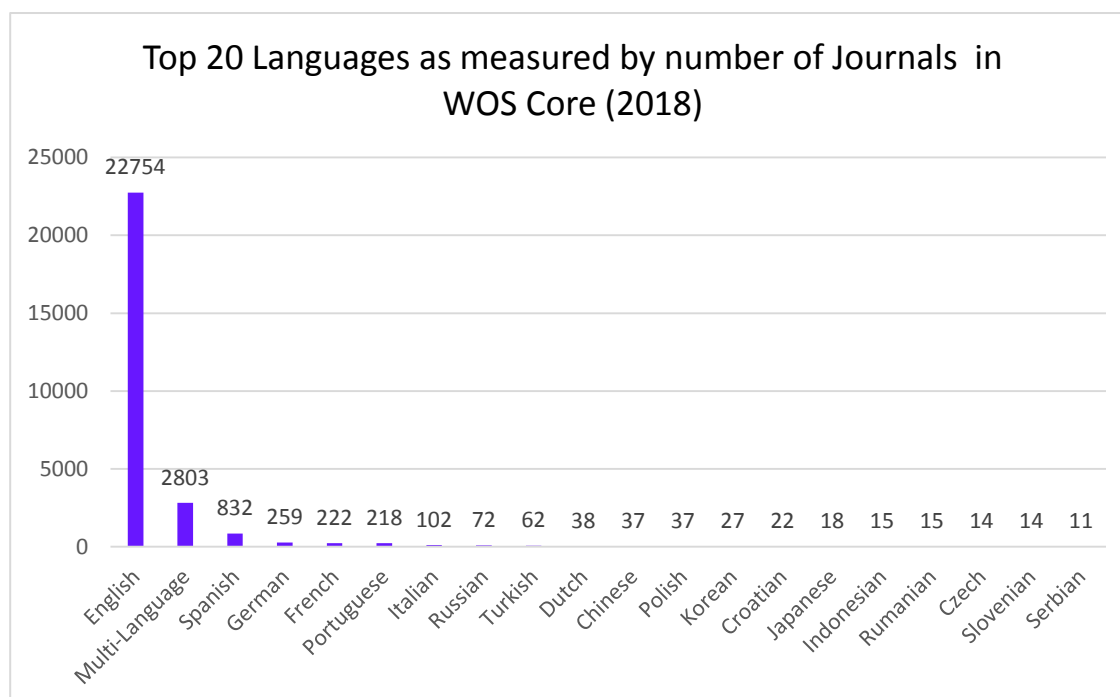
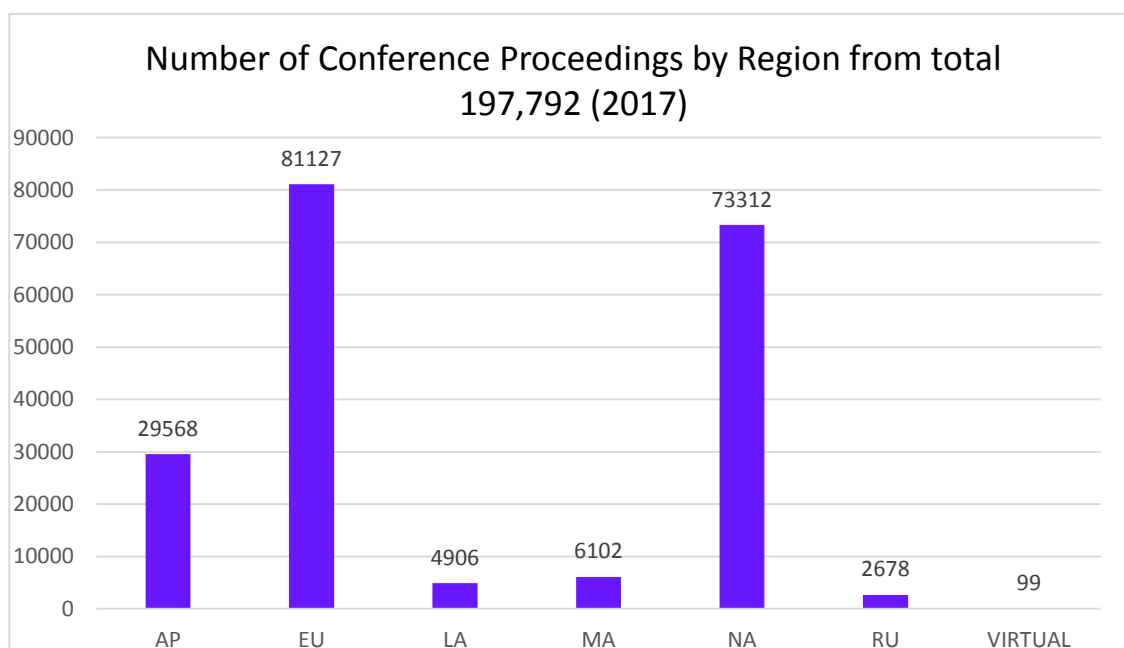


Top 25 Countries as measured by number of journals in WOS CORE  
out of **20,937** total Journals (2018)





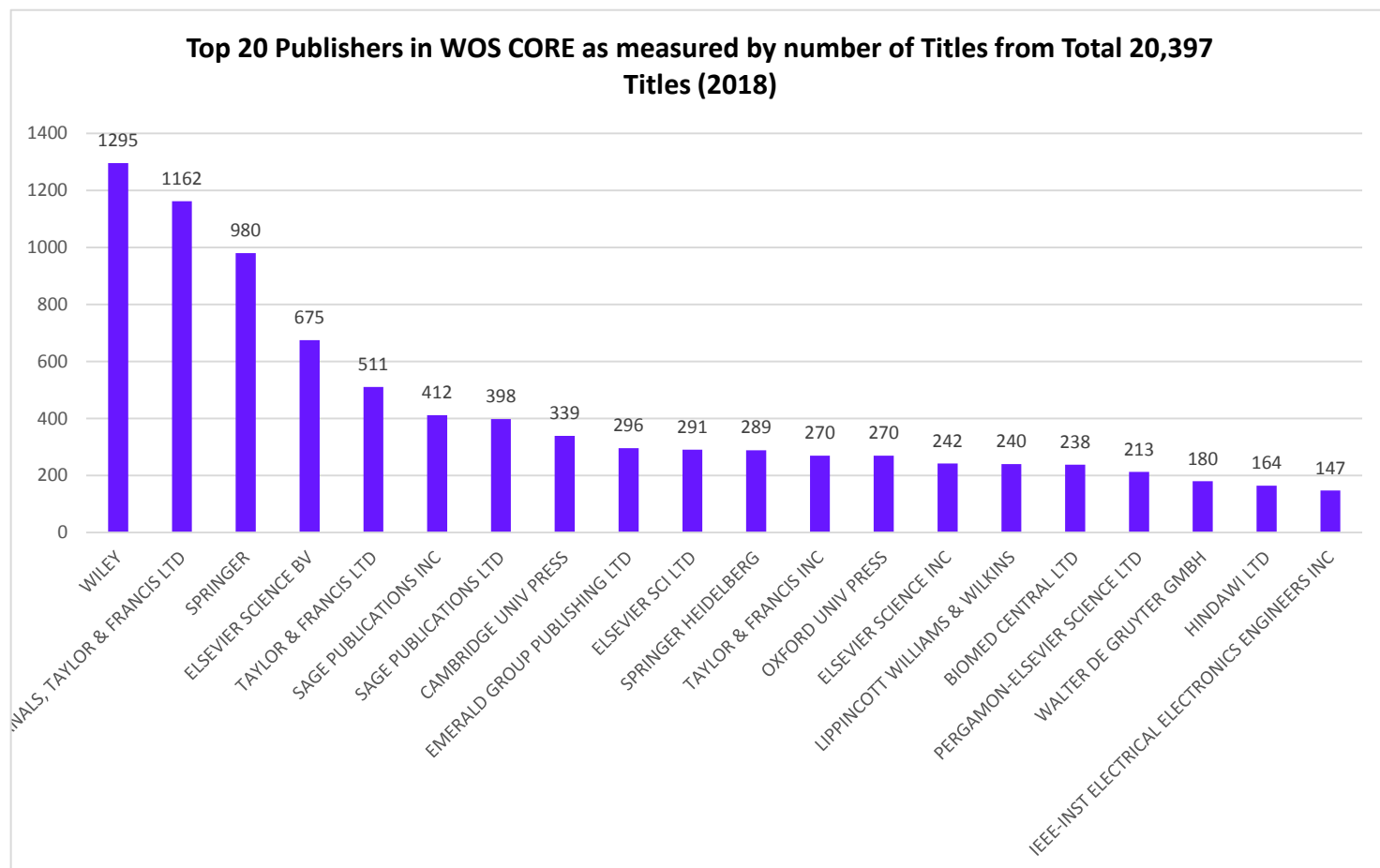
For what concerns the **Conference Proceedings Citation Index**, the split<sup>13</sup> for main regions is shown below:



<sup>13</sup> August 2018

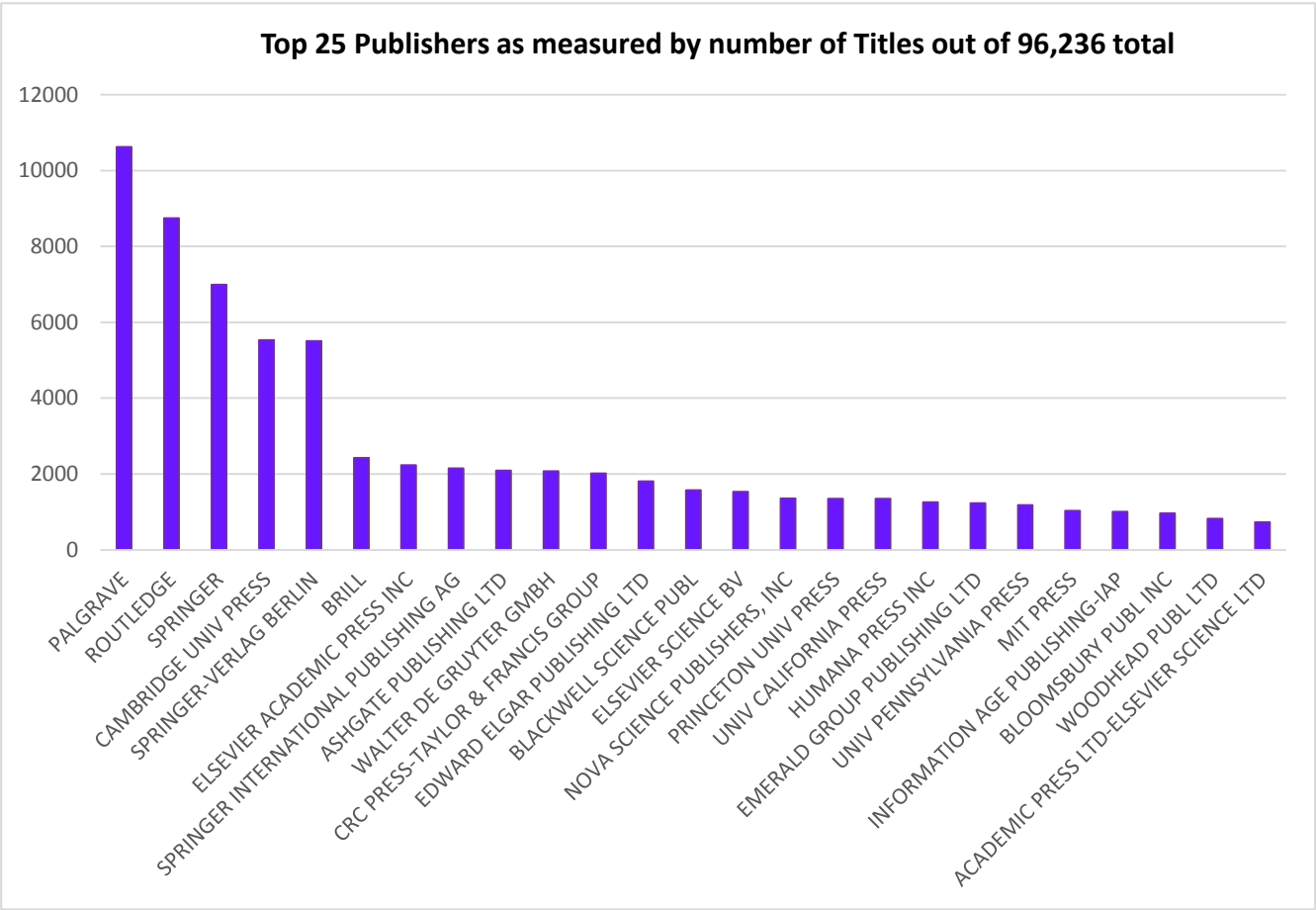
## PUBLISHER COVERAGE

Since its inception, the Web of Science™ Core Collection has remained publisher neutral. Below is a chart reflecting the top 20 publishers as indexed within the SCIE, SSCI, AHCI and ESCI indexes<sup>14</sup>



<sup>14</sup> August 2018

Below is a chart showing the top 20 publishers as indexed within the Book Citation Index<sup>15</sup>



<sup>15</sup> September 2018

## OVERLAP WITH OTHER WEB OF SCIENCE DATABASES

Web of Science™ Core Collection is part of the Web of Science platform. Below is a graph showing the overlap in journals across the Web of Science platform<sup>16</sup>.

WoS Datasets + Overlap	# SCIE	# SSCI	# AHCI	# WoS 3	# ESCI Indexed	# WoS CC	# BCI	# ZR	# Medline	# SCIELO	# RSCI	# CSCD	# KDJ	# Inspec	# FSTA	# CABI	# De-duped
# Titles (Total)	9038	3330	1815	13109	7279	20388	5348	4690	5237	1252	629	1587	2310	4492	1172	7979	34,295
# SCIE	9038	648	74	9038	0	9038	3365	1182	3894	177	20	146	109	2332	694	3455	9038
# SSCI	648	3330	390	3330	0	3330	159	47	742	53	4	2	19	271	64	530	3330
# AHCI	74	390	1815	1815	0	1815	10	15	30	26	5	0	7	16	2	28	1815
# WoS 3	9038	3330	1815	13109	0	13109	3426	1205	4242	237	29	148	131	2516	721	3797	13109
# ESCI Indexed	0	0	0	0	7279	7279	0	16	295	91	66	21	107	694	46	536	7279
# WoS CC	9038	3330	1815	13109	7279	20388	3426	1221	4537	328	95	169	238	3210	767	4333	20388
# BCI	3365	159	10	3426	0	3426	5348	1887	2265	93	51	70	49	268	513	2766	5348
# ZR	1182	47	15	1205	16	1221	1887	4690	404	93	40	83	24	125	106	1498	4690
# Medline	3894	742	30	4242	295	4537	2265	404	5237	84	37	35	30	257	404	2134	5237
# SCIELO	177	53	26	237	91	328	93	93	84	1252	0	0	0	15	25	217	1253
# RSCI	20	4	5	29	66	95	51	40	37	0	629	0	0	17	0	24	629
# CSCD	146	2	0	148	21	169	70	83	35	0	0	1587	0	163	17	150	1587
# KDJ	109	19	7	131	107	238	49	24	30	0	0	0	2310	36	21	59	2311
# Inspec	2332	271	16	2516	694	3210	268	125	257	15	17	163	36	4492	115	461	4492
# FSTA	694	64	2	721	46	767	513	106	404	25	0	17	21	115	1172	811	1172
# CABI	3455	530	28	3797	536	4333	2766	1498	2134	217	24	150	59	461	811	7979	7979
# Unique	1191	1531	1343	4504	5574	10078	765	2218	491	787	435	1181	2007	1081	235	2531	
# All Datasets																	34,203

Counts = Total number of titles on WoS source list as of 5/15/18. ESCI indexed = number of titles receipted as of 5/15/18

# De-Duped Titles = Total number of de-duped titles per WoS edition.

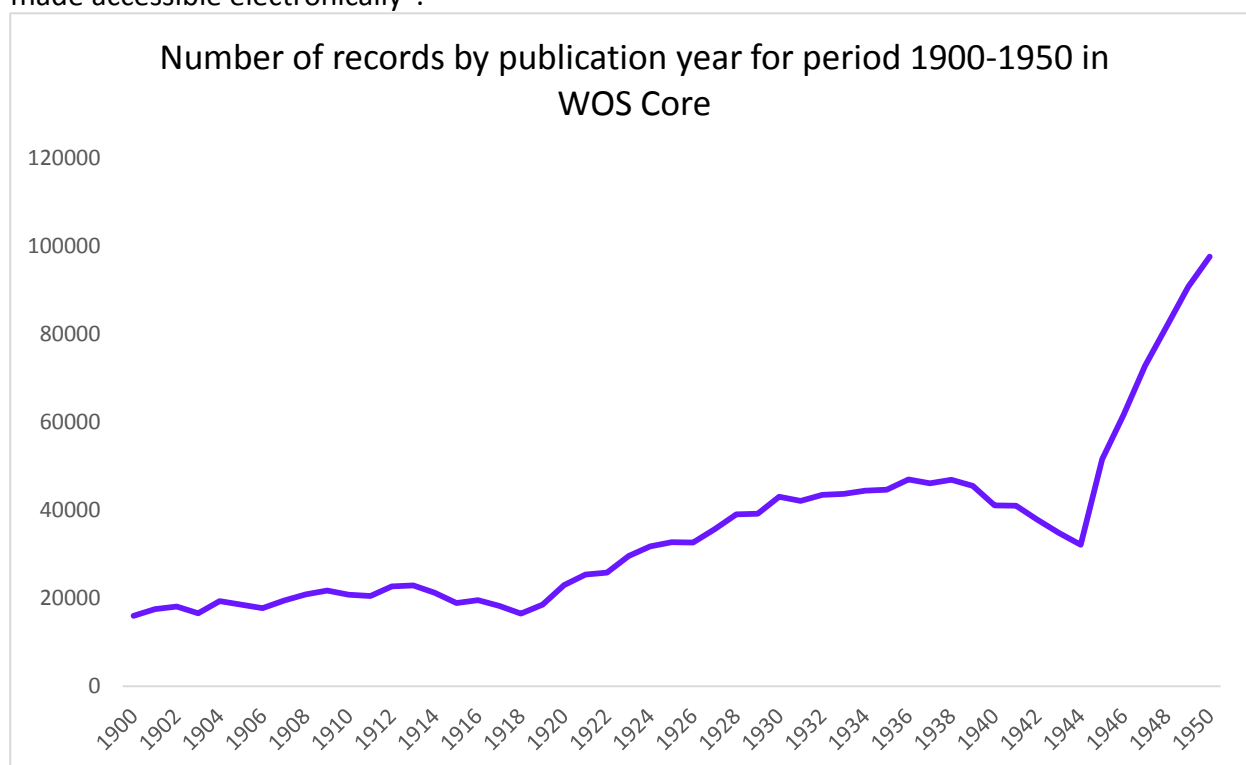
# Unique - Number of unique titles in that edition only; Title is not indexed in any other WoS edition. For example, SCIE indexes 1,191 titles that are not indexed in SSCI, AHCI, ESCI, BCI, ZR, Medline, RCI or hosted products.

The number of unique journals on the Web of Science platform is around 34,295 (around 23,000 titles excluding hosted content: INSPEC, FSTA, CABI).

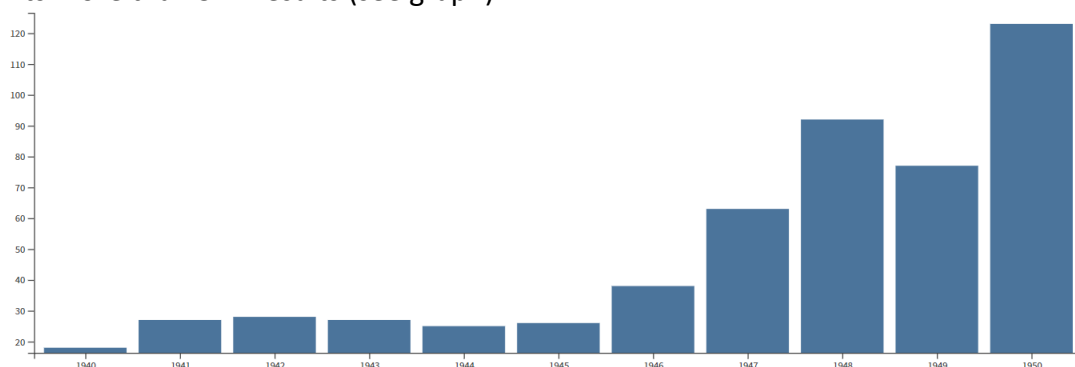
<sup>16</sup> June 2018

## BACKFILES

The Web of Science opens access to over a century of backfiles in the sciences, social sciences, arts and humanities. Backfile archives enhance the depth and breadth of results of any search. As Garfield himself noted “By making people bibliographically aware of the older literature, now they want it, and this is all happening at the same time that a lot of this literature is being made accessible electronically”.

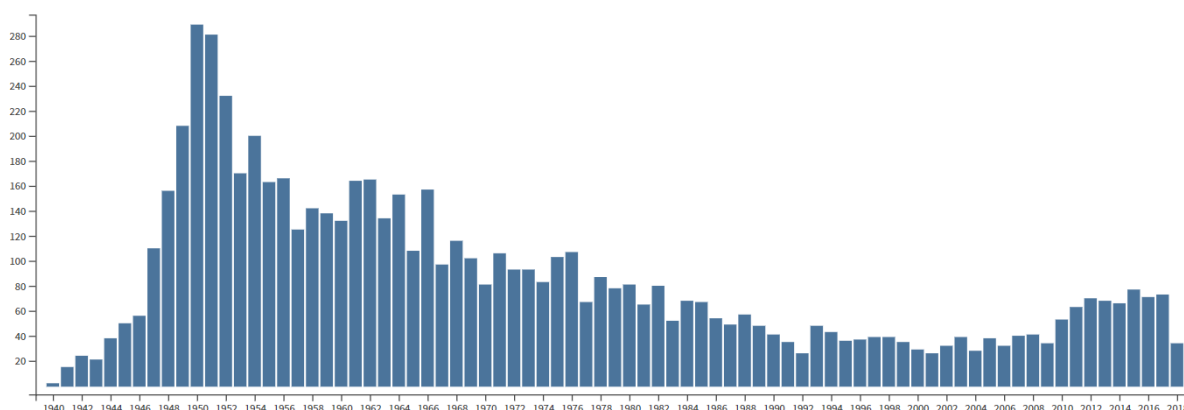


The importance of backfiles can be easily proven even in areas characterized from a fast changing landscape, for instance the Medicine: searching for Leukemia as a topic and limiting the search to papers published in the time range 1940-1950, Web of Science™ Core Collection hits more than 544 results (see graph).

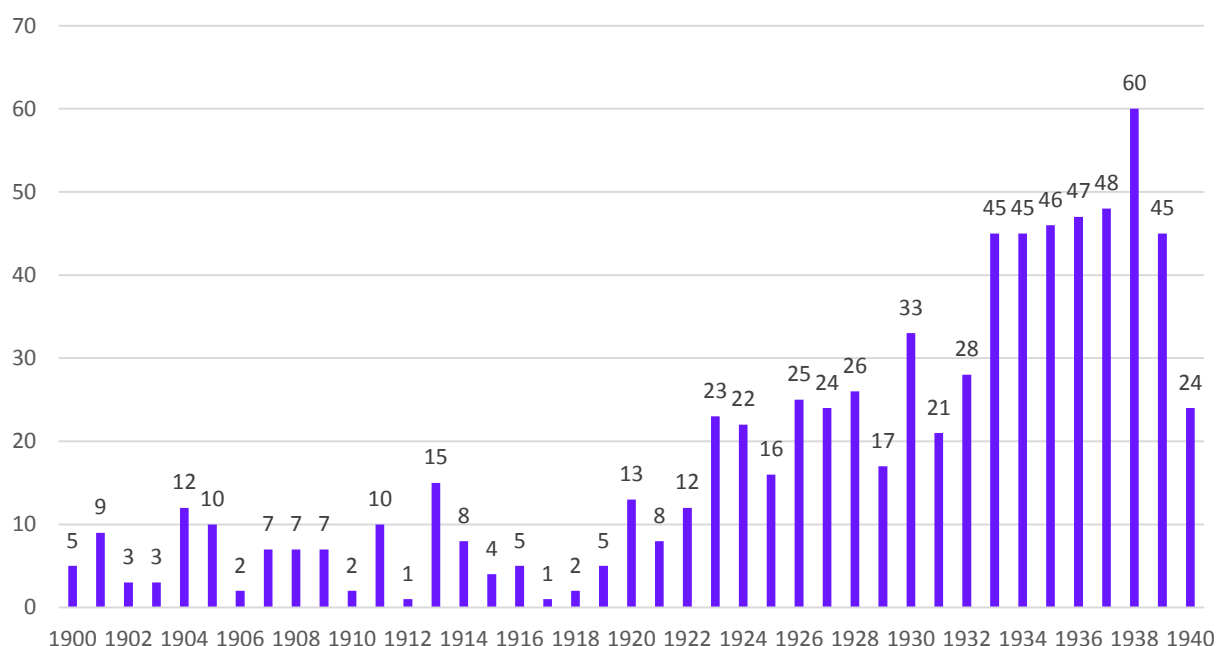


In order to demonstrate that current research is still influenced by older research, one can produce a “Citation Report” based on the set of 544 papers related to Leukemia between 1940 and 1950. The Citation Report collects the subsequent Citing Articles to produce a ‘Total Citing

Article dataset' which can be analysed by publication year in order to produce a timeline for the citing papers. The analysis of the citing article dataset clearly provides evidence that current research (last 10 years for example) is citing older Leukemia research published during the period 1940-1950.



Count of items published during 1900-1940 by Nature cited by records published in 2017 as indexed by WOS Core 3



Another way to explore the age of material cited is to analyse the publication year of items cited by current research. An analysis was performed of the age of items cited in Nature during the period 1900-1940 by current research (publication year 2017) as indexed in WOS Core 3. An analysis of the cited references from items indexed in 2017 reveals that older material from Nature is still relevant today.



Analysis of usage statistics of STM publishers' platforms has revealed that about 20-25% of the downloaded articles are at least five years old.

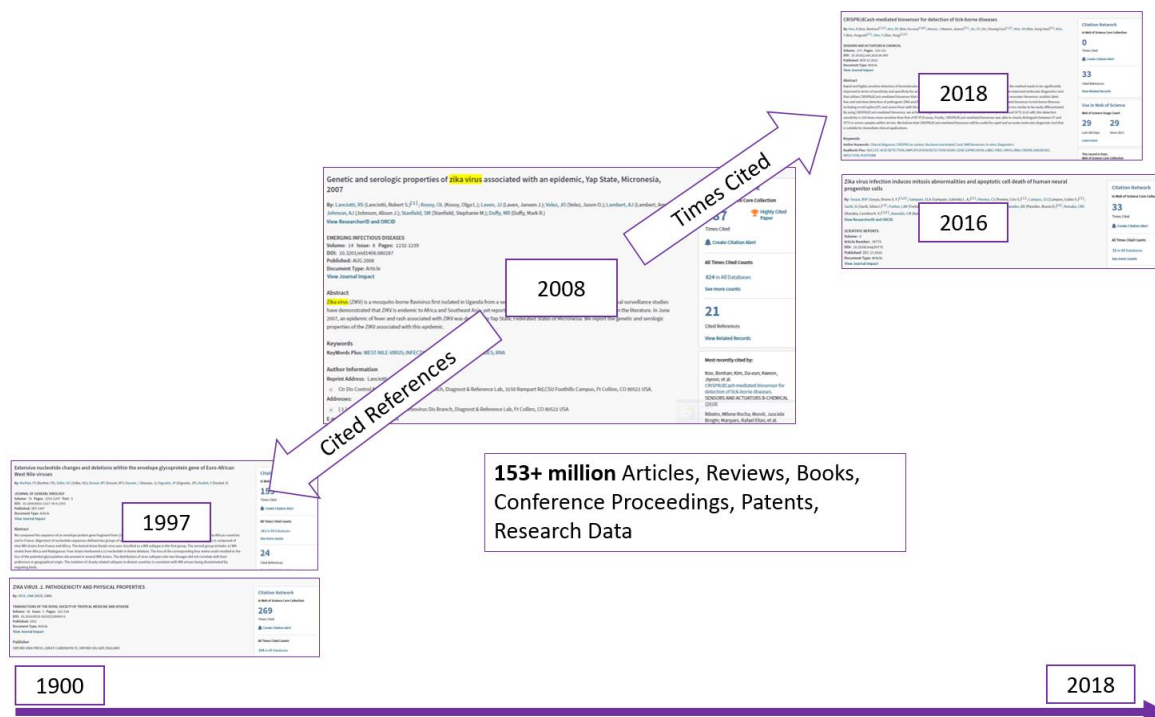
Surprisingly, the percentage of old article downloads is higher in biomedical areas than in humanities<sup>17</sup>.

Again: more than 60% of "50 Most Cited Items" in the Web of Science™ Core Collection were published over 20 years ago.

Web of Science™ Core Collection provides access to millions of additional source items and cited references — plus cited reference searching for the entire database.

- CENTURY OF SCIENCE: Science Citation Index Expanded - to 1900
- CENTURY OF SOCIAL SCIENCES: Social Sciences Citation Index - to 1900
- Arts & Humanities Citation Index - to 1975
- Current Chemical Reactions - to 1986, plus archives from 1840 - 1985 from INPI
- Index Chemicus - to 1993

Web of Science™ Core Collection users can access authors' cited references for all years of content. Cited reference search results link research across time and disciplines, and reveal connections that cannot be found by standard search techniques.



<sup>17</sup> Journal Backfiles in Scientific Publishing: A Marketing White Paper, British Library

## DOCUMENT TYPE INDEXING

All documents are indexed in the Web of Science™ Core Collection following a **cover-to-cover** indexing approach: every significant item published within a journal is attributed to a document type and indexed. This approach is a distinctive and unique characteristic of the Web of Science Core Collection. Here is a list of all possible document types and their description:

- **Article:** Reports of research on original works. Includes research papers, features, brief communications, case reports, technical notes, chronology, and full papers that were published in a journal and/or presented at a symposium or conference.
- **Abstract of Published Item:** Bibliographic-only data on a published paper. Generally finds records dating back to 1974 or before.
- **Art Exhibit Review:** Reviews of gallery or museum showings of artworks.
- **Bibliography:** A list, often with descriptive or critical notes, of writings relating to a particular subject.
- **Biographical-Item:** Obituaries, articles focusing on the life of an individual, and articles that are tributes to or commemorations of an individual.
- **Book:** A monograph or publication written on a specific topic.
- **Book Chapter:** A monograph or publication written on a specific topic within a main division in a book.
- **Book Review:** A critical appraisal of a book (often reflecting a reviewer's personal opinion or recommendation) that evaluates such aspects as organization and writing style, possible market appeal, and cultural, political, or literary significance<sup>18</sup>.
- **Chronology:** A review of events on a specific topic or subject in their order of occurrence in time.
- **Correction:** Correction of errors found in articles that were previously published and which have been made known after that article was published. Includes additions, errata, and retractions.
- **Correction, Addition:** Correction of errors found in articles that were previously published and which have been made known after that article was published. Includes additions, errata, and retractions.
- **Dance Performance Review:** Reviews of solo dance recitals, complete dance productions, dance programs consisting of several works, and other types of performed dances.

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<sup>18</sup> Full coverage for SSCI & AHCI, only Science, Nature and The Scientist for SCIE

- **Database Review:** A critical appraisal of a database, often reflecting a reviewer's personal opinion or recommendation. Refers to a structured collection of records or data that is stored in a computer system.
- **Discussion:** An article or paper that discusses questions in an open and usually informal debate. Generally finds records dating back to 1996 or before.
- **Editorial Material:** An article that gives the opinions of a person, group, or organization. Includes editorials, interviews, commentary, and discussions between individual, post-paper discussions, round table symposia, and clinical conferences.
- **Excerpt:** A selection from or a fragment of a literary or musical work, which cannot stand as a separate work in its own right.
- **Fiction, Creative Prose:** Includes short stories and other works of creative prose.
- **Film Review:** A review of a motion picture.
- **Hardware Review:** A critical appraisal of computer hardware, often reflecting a reviewer's personal opinion or recommendation. Refers to objects that you can actually touch, like disk drives, keyboards, printers.
- **Item About An Individual:** A review of the work(s) of a celebrated person in a particular field of study.
- **Letter:** Contributions or correspondence from the readers to the journal editor concerning previously published material.
- **Meeting Abstract:** A general summation of completed papers that were or will be presented at a symposium or conference.
- **Meeting Summary**<sup>19</sup>: A paper that covers multiple meeting abstracts in a variety of subjects.
- **Music Performance Review:** Review of a live musical performance (recital, concert, and opera).
- **Music Score:** Transcript of the original and entire draft of a musical composition or an arrangement with the parts for the different instruments or voices written on staves one above another.
- **Music Score Review:** Review of a bound musical composition or bound collection of musical compositions.
- **News Item:** News, current events, and recent developments.
- **Note:** A paper that mentions or remarks on a published paper on a specific subject. Generally finds records dating back to 1996 or before.
- **Poetry:** Compositions in verse; metrical writing.

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<sup>19</sup> 900 most important journals (Highest IF) on SCIE

- **Proceedings Paper:** Published literature of conferences, symposia, seminars, colloquia, workshops, and conventions in a wide range of disciplines. Generally published in a book of conference proceedings. Records covered in the two Conference Proceedings indexes (CPCI-S and CPCI-SSH) are identified as Proceedings Paper. However, the same records covered in the three indexes (SCI-E, SSCI, and A&HCI) are identified as Article when published in a journal.
- **Record Review:** Reviews of recorded music or speech.
- **Reprint:** An article that was previously published.
- **Review<sup>20</sup>:** A renewed study of material previously studied. Includes review articles and surveys of previously published literature. Usually will not present any new information on a subject.
- **Script:** includes film scripts, plays, TV, and radio scripts.
- **Software Review:** A critical appraisal of computer software, often reflecting a reviewer's personal opinion or recommendation. Refers to programs, procedures, and rules, along with associated documentation pertaining to the operation of a computer system.
- **Theater Review:** Review of a performed play.
- **TV Review, Radio Review:** Reviews of television and radio broadcasts.
- **TV Review, Radio Review, Video Review:** Reviews of television, radio broadcasts, and videos.

Some records in the Web of Science™ Core Collection may have two document types, for instance: Article and Proceedings Paper. An Article is generally published in a journal. A Proceedings Paper is generally published in a book of conference proceedings. Records covered in the two Conference Proceedings indexes (CPCI-S and CPCI-SSH) are identified as Proceedings Paper. The same records covered in the three indexes (SCI-E, SSCI, and A&HCI) are identified as Article when published in a journal.

If a document is attributed to more than one document type, the document type is also associated with a precedence code to be used if necessary to attribute only one document type. See Appendix C for the precedence code (the document type associated with the higher integer value in column “precedence” is attributed to that document).

In the Web of Science™ Core Collection, there is the possibility to filter for any document types selecting Basic Search, then the field “document type” and using the scrollbar menu to pin the desired document type (see below).

As opposed to other generalist databases, the Web of Science™ Core Collection documents are **indexed directly from the publisher: all content stems from direct indexing and not from an aggregation of third party materials.**

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<sup>20</sup> A review is an article published on a review journal or with more than 100 cited references

## Web of Science

Search Tools ▾ Searches and

Select a database Web of Science Core Collection ▾ [Learn More](#)

Basic Search Cited Reference Search Advanced Search + More

× All document types | Document Type ▾ Search

+ Add row | Reset

Auto-suggest publication names

- All document types
- Article
- Abstract of Published Item
- Art Exhibit Review
- Bibliography
- Biographical-Item
- Book

Analysis of document type as indexed by WOS CORE all editions 1900-2018<sup>21</sup>

## Web of Science

Search Tools ▾ Searches and alerts ▾ Search History

Results: ...  
(from Web of Science Core Collection)

You searched for: YEAR PUBLISHED:  
(1900-2018) ...[More](#)

[Create Alert](#)

### Refine Results

Search within results for...

Filter results by:

Document Types Refine Exclude Cancel Sort these by: Record Count ▾

The first 100 Document Types (by record count) are shown. Analyze Results feature not available for over 50,000,000 records.

<input checked="" type="checkbox"/> ARTICLE (43,279,952)	<input type="checkbox"/> CORRECTION (263,151)	<input type="checkbox"/> THEATER REVIEW (33,603)	<input type="checkbox"/> RETRACTION (2,909)
<input type="checkbox"/> PROCEEDINGS PAPER (8,012,589)	<input type="checkbox"/> CORRECTION ADDITION (148,135)	<input type="checkbox"/> DANCE PERFORMANCE REVIEW (24,100)	<input type="checkbox"/> SCRIPT (2,787)
<input type="checkbox"/> MEETING ABSTRACT (7,765,811)	<input type="checkbox"/> BIOGRAPHICAL ITEM (128,159)	<input type="checkbox"/> MUSIC SCORE REVIEW (18,334)	<input type="checkbox"/> HARDWARE REVIEW (2,578)
<input type="checkbox"/> BOOK REVIEW (4,359,926)	<input type="checkbox"/> ART EXHIBIT REVIEW (115,254)	<input type="checkbox"/> REPRINT (17,368)	<input type="checkbox"/> DATABASE REVIEW (1,491)
<input type="checkbox"/> EDITORIAL MATERIAL (3,028,535)	<input type="checkbox"/> BOOK (97,045)	<input type="checkbox"/> SOFTWARE REVIEW (15,710)	<input type="checkbox"/> CHRONOLOGY (1,210)
<input type="checkbox"/> LETTER (2,328,148)	<input type="checkbox"/> ITEM ABOUT AN INDIVIDUAL (88,415)	<input type="checkbox"/> ABSTRACT OF PUBLISHED ITEM (13,434)	<input type="checkbox"/> MUSIC SCORE (1,161)
<input type="checkbox"/> REVIEW (1,772,786)	<input type="checkbox"/> DISCUSSION (80,417)	<input type="checkbox"/> BIBLIOGRAPHY (12,940)	<input type="checkbox"/> EARLY ACCESS (1,141)
<input type="checkbox"/> NOTE (1,471,668)	<input type="checkbox"/> RECORD REVIEW (73,911)	<input type="checkbox"/> TV REVIEW RADIO REVIEW (9,107)	<input type="checkbox"/> DATA PAPER (1,102)
<input type="checkbox"/> BOOK CHAPTER (1,295,727)	<input type="checkbox"/> FILM REVIEW (66,456)	<input type="checkbox"/> EXCERPT (7,444)	<input type="checkbox"/> MAIN CITE (99)
<input type="checkbox"/> NEWS ITEM (534,492)	<input type="checkbox"/> MUSIC PERFORMANCE REVIEW (65,836)	<input type="checkbox"/> RETRACTED PUBLICATION (5,749)	<input type="checkbox"/> MEETING SUMMARY (25)
<input type="checkbox"/> POETRY (279,533)	<input type="checkbox"/> FICTION CREATIVE PROSE (48,496)	<input type="checkbox"/> TV REVIEW RADIO REVIEW VIDEO (4,760)	

<sup>21</sup> September 2018

Once a record is indexed<sup>22</sup>, several relevant information and different level of metadata are captured<sup>23</sup>:

Look Up Full Text   Full Text from Publisher   Save to Other File Formats   Add to Marked List   6 of 8

### Synthesis and Characterization of Au NPs/Molybdophosphoric Acid/CNT Tricomponent Nanohybrid

By: Ahmadpour, A (Ahmadpour, Ali)<sup>[1]</sup>; Afifeh, MR (Afifeh, Mohammad Reza)<sup>[1]</sup>; Zebardad, SM (Zebardad, Seyyed Mojtaba)<sup>[2]</sup>; Avati, A (Ayati, Ali)<sup>[3]</sup>; Bamoharram, FF (Bamoharram, Fatemeh F.)<sup>[4]</sup>

Hide ResearcherID and ORCID

Author	ResearcherID	ORCID Number
Yavarinia, Hossein	B-6506-2016	
zebardad, seyed mojtaba		<a href="http://orcid.org/0000-0002-4632-409X">http://orcid.org/0000-0002-4632-409X</a>

SYNTHESIS AND REACTIVITY IN INORGANIC METAL-ORGANIC AND NANO-METAL CHEMISTRY  
Volume: 46 Issue: 4 Pages: 596-601  
DOI: 10.1080/15533174.2014.988822  
Published: APR 2 2016  
Document Type: Article  
[View Journal Impact](#)

#### Abstract

In the present study, hybrids of gold nanoparticle-decorated multiwalled carbon nanotubes (CNTs) were synthesized through an effective, green and facile method, using molybdophosphoric acid. This polyoxometalate with exciting properties was used as reducing agent in the synthesis of stabilized gold nanoparticles and also linking them to the CNTs at ambient temperature. The prepared nanohybrids were characterized by TGA, XRD, FTIR, Raman, and TEM techniques. Using this method, a yield of 17% in CNTs decoration with a well distribution of nanoparticle was successfully achieved within 8h.

#### Keywords

Author Keywords: CNT; gold nanoparticles; green; decoration; nanohybrid  
KeyWords Plus: MULTIWALLED CARBON NANOTUBES; GOLD NANOPARTICLES; METAL; COMPOSITION; OXIDATION; CATALYSTS; PLATINUM; GREEN

#### Addresses:

- [1] Ferdowsi Univ Mashhad, Dept Chem Engrn, Mashhad, Iran
- [2] Ferdowsi Univ Mashhad, Dept Mat Sci & Engrn, Mashhad, Iran
- [3] Quchan Univ Adv Technol, Dept Chem Engrn, Quchan, Iran
- [4] Islamic Azad Univ, Mashhad Branch, Dept Chem, Mashhad, Iran

E-mail Addresses: [ahmadpour@um.ac.ir](mailto:ahmadpour@um.ac.ir)

#### Funding

Funding Agency	Grant Number
Research Deputy of Ferdowsi University of Mashhad	2/19803-22/9/90

[View funding text](#)

#### Publisher

TAYLOR & FRANCIS INC, 530 WALNUT STREET, STE 850, PHILADELPHIA, PA 19106 USA

#### Journal Information

Table of Contents: [Current Contents Connect](#)  
Impact Factor: [Journal Citation Reports](#)

#### Categories / Classification

Research Areas: Chemistry; Science & Technology - Other Topics  
Web of Science Categories: Chemistry, Inorganic & Nuclear; Nanoscience & Nanotechnology

#### Document Information

Language: English  
Accession Number: WOS:000364854300006  
ISSN: 1553-3174  
eISSN: 1553-3182

#### Other Information

IDS Number: CW2WR  
Cited References in Web of Science Core Collection: 43  
Times Cited in Web of Science Core Collection: 0

#### Citation Network

In Web of Science Core Collection  
0 Times Cited  
[Create Citation Alert](#)

43 Cited References  
[View Related Records](#)

#### Use in Web of Science

Web of Science Usage Count  
3 Last 180 Days   163 Since 2013  
[Learn more](#)

This record is from:  
Web of Science Core Collection  
- Science Citation Index Expanded

[Suggest a correction](#)

<sup>22</sup> See Appendix D for checking and comparing the real article full text

<sup>23</sup> A record can contain more than 80 fields

<b>1</b>	All authors of a publication are captured and credited. In 2006 “Full Author Names” have been added in lieu of “Block Names” (last name + first name initial).
<b>2</b>	All affiliations of any authors of a publication are captured. Reprint addresses have been added: in 1966 (SSCI) and 1973 (SCIE). In 2008 affiliations started to be associated with authors (superscripted numbers linking authors and affiliations).
<b>3</b>	All abstracts have been added to the record since a certain date: SCIE docs (1990), SSCI docs (1991), CPCI docs (1997), AHCI docs (2000).
<b>4</b>	Author Keywords and Keyword Plus started to be captured and indexed in 1991 (both are clickable and searchable). <i>KeyWords Plus</i> ® are index terms in which the terms are derived from the titles of articles cited by the author of the article being indexed.
<b>5</b>	All bibliographic metadata are captured: paper (Source, Volume, Issue, DOI, etc), journal (ISSN, Publisher, etc). UT number (or Accession Number), the unique identifier on Web of Science™ Core Collection, is added to the record. Links to other resources are also exposed (see chapter <u>integrated solutions</u> ).
<b>6</b>	Funding Acknowledgments have been added to the SCIE records since 2008 and to the SSCI records since March 2015. The project of <b>unifying funding agencies’ names</b> is ongoing.
<b>7</b>	All cited references are captured for any papers. References have been captured for CPCI starting from 1999.
<b>8</b>	Since September 2015 author identifiers (ResearcherID and ORCID) have increased authors’ prominence and the ease to retrieve their publications and are indexed in a box that can be opened to display the author identifier table

## CONTENT SELECTION

A dedicated in-house team of experts daily evaluates journals for inclusion in the Web of Science™ Core Collection.

The Web of Science™ Core Collection is **comprehensive but not all-inclusive**.

The study of patterns and characteristics in the scientific literature supports this decision. It is well known that a relatively small number of journals publish the majority of significant scholarly results.

In the mid-1930s, while studying the literature of electrical engineering, the English mathematician and librarian Samuel C. Bradford noted that the key literature for a given specialty tends to form itself into a discrete core of journals. He also noted that expanding a search beyond this core leads to rapidly diminishing returns in terms of pertinent data for the subject at hand. The principle that he ultimately formulated, known as **Bradford's Law**, holds that in any given field, relatively few journals account for a substantial majority of important findings and advancements.

In addition to being extended and applied in many fields, Bradford's Law has been repeatedly verified by data from Clarivate Analytics databases. A study of the Science Citation Index, for example, revealed that only 500 journals accounted for 70 percent of the papers indexed in the database in 1969. More recently, a 2008 analysis of the 7,621 journals then covered in the Journal Citation Reports showed that 50 percent of the citations generated by that journal collection derived from only about 300 journals, and that those 300 journals accounted for 30 percent of all the articles published by the total collection.

The key for the most effective coverage, then, is not necessarily a sprawling assortment of journals, but rather a **collection that is carefully selected, assiduously curated, and constantly evaluated** for improvement, reflecting the knowledge of the collective academic community.

The Web of Science™ Core Collection undergoes continuous updating in order to keep pace with the ever-changing, international landscape of science and scholarship, as new subject areas emerge while older ones contract or transform.

Annually, around 2,000 new titles are evaluated for inclusion, while the indexed content (existing titles) is continuously reviewed for quality, relevance and editorial excellence. The annual acceptance rate is around 12%-14% for WOS SCIE, SSCI & AHCI.

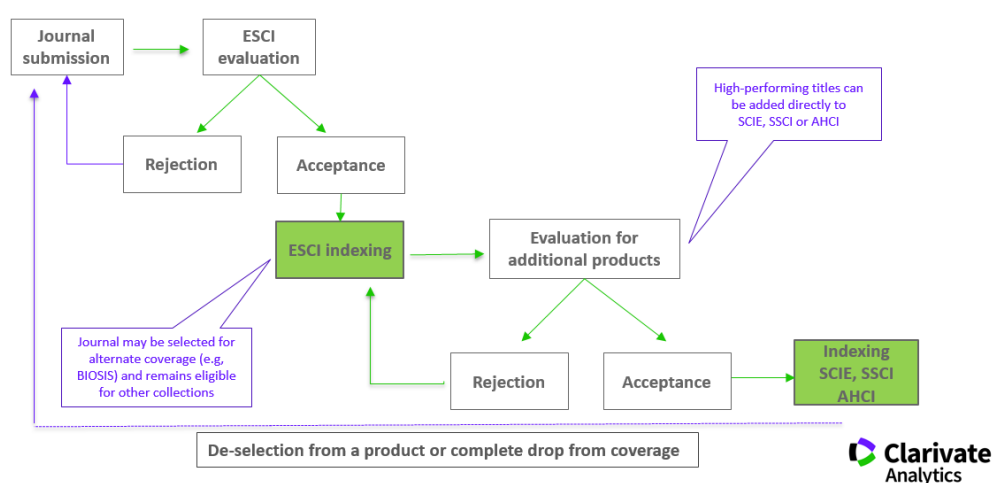


## PROCESS

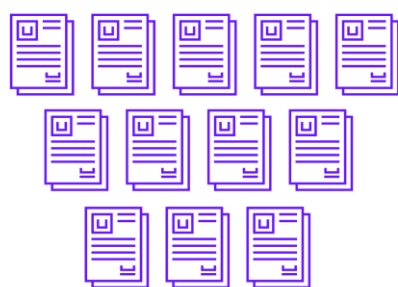
Any peer-reviewed journal can be indexed on Web of Science™ Core Collection. Editors (or publishers) fill in the online submission form at <http://mjl.clarivate.com/journal-submission/> or send print issues at the following address:

Clarivate Analytics  
ATT: Publication Processing  
1500 Spring Garden Street, Fourth Floor  
Philadelphia, PA 19130  
USA

The following infographs illustrate the selection process:



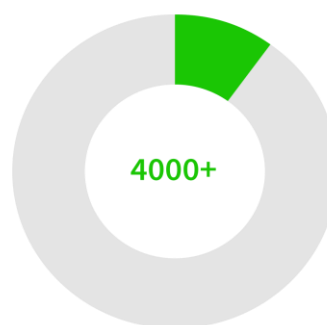
## The sea of scholarly information



**The Core of Science**

10 - 12% Accepted for flagship indexes

60% Accepted for ESCI



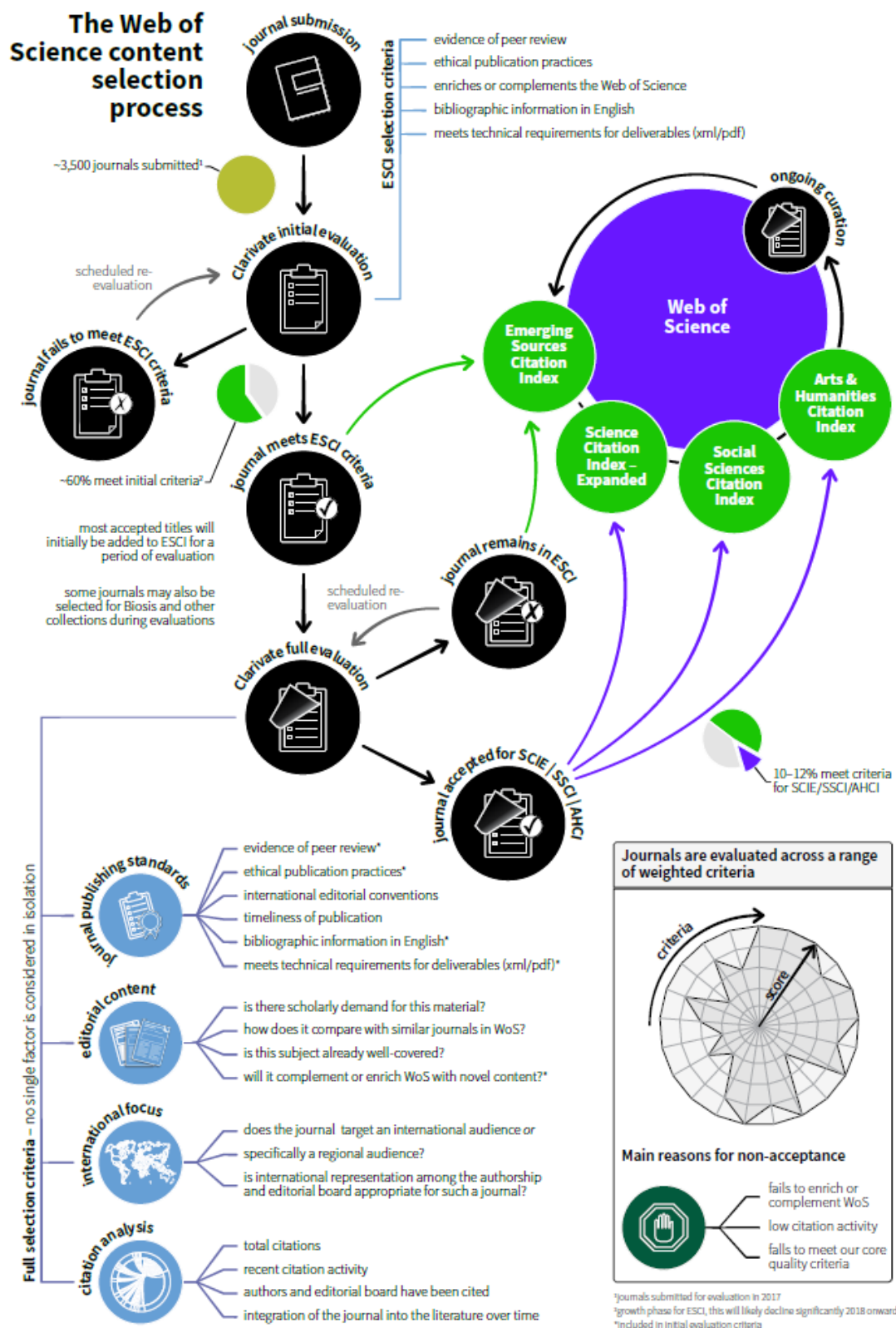
Evaluated for ESCI (2015-2016) >10000

### Core Collection Databases:

SCIE – Science Citation Index Expanded (included in JCR)  
SSCI – Social Science Citation Index (included in JCR)  
AHCI – Arts & Humanities Citation Index  
ESCI – Emerging Sources Citation Index

**Web of Science**  
*Discover the difference*

## CONTENT SELECTION PROCESS INFOGRAPH



The first step following the submission of a journal for evaluation would be to check if the journal meets the minimal criteria for inclusion in the Emerging Sources Citation Index (ESCI).

At this early stage the journal is **visible** in the Web of Science™ Core Collection, even if it's not included in the original indexes and it doesn't participate to the Journal Citation Report analysis and computations.

After the successful inclusion in ESCI, the journal is, in any case, evaluated for inclusion in SCIE, SSCI and AHCI: if it meets the most rigorous criteria, the journal moves to these indexes, otherwise it remains in ESCI and becomes eligible for re-evaluation.

The entire process for being indexed in SCIE, SSCI and AHCI, however, is more rigorous and time-consuming. **Evaluations vary in length** but can last one year or more, depending on the subject needs.

## SELECTION CRITERIA

The Journal Selection Process is based on four main pillar criteria: **Publishing Standards, Editorial Content, International Focus, and Citation Analysis**. The graph below shows the most relevant criteria and the criteria in green are the ones to be fulfilled for inclusion in ESCI. **No one factor is considered in isolation** and all factors, both qualitative and quantitative, are considered to determine the overall strengths and weaknesses of a given journal.

### Web of Science Core Collection journal selection process



Makes our rigorous selection criteria  
more transparent by exposing content earlier in the selection process



<https://wokinfo.com/essays/journal-selection-process/>

➤ **Journal Publishing Standards** are concerned the main factors for consideration include:

- **Peer review**

Directly checked at submission and verified by Clarivate Analytics editors.

- **Ethical publishing practices**

Attention is paid to avoiding indexing predatory journals and standards of expected ethical behaviour has to be agreed by all parties involved in the act of publishing: the author, the journal editor, the peer reviewer, the publisher and the society of society-owned or sponsored journals.

- **Meets technical requirements (XML / PDF)**

For ESCI, it has been established that the preferred format. is electronic.

- **Timeliness of publication**

The basic criterion in the evaluation process is seemingly simple yet of fundamental importance: a journal must be published according to its stated frequency. The ability to publish on time implies a healthy backlog of manuscripts, essential for ongoing viability; the chronically late appearance of a journal is not acceptable. To gauge the timeliness of a journal, the selection process requires that the publication produces a minimum of three consecutive, current issues in accordance with its specified schedule, as soon as it is published; this establishes that the current content flow of the journal is robust.

Where a journal publishes articles electronically one at a time instead of collecting articles for release as an issue, the editor looks for a steady flow of articles over a period of up to one year.

- **International editorial conventions**

These include an informative title for the journal; fully descriptive article titles and author abstracts; complete bibliographic information for all cited references; and full addresses for every author. Inclusion of Funding Acknowledgements is also strongly recommended. These conventions are intended to optimize the possibility to retrieve the journal's source articles.

- **English-language bibliographic information**

English is currently the global language of science. For this reason, Web of Science™ Core Collection focuses on journals that publish full text in English, or, at least, bibliographic information, such as titles, abstracts, and cited references in English, in order to allow thorough cross-searching by Web of Science users worldwide. Cited references must also be listed in the Roman alphabet. Although many journals covered in the Web of Science™ Core Collection publish articles with bibliographic information in

English and full text in another language, the evident trend is that the journals most important to the international research community will publish full text in English. This is particularly true in the natural sciences: there are exceptions to this rule in the Arts & Humanities and in the Social Sciences. For example, English-language text is not a requirement in the Arts & Humanities scholarship where the national orientation takes precedence in studies of regional or national literature. Nonetheless, the availability of the full-text in English is highly desirable, especially if the journal intends to serve an international community of researchers.

- **Editorial Content** is probably the most intangible of the four pillar criteria. As Bradford and others noted an essential core of scientific literature forms the basis for all scholarly disciplines. However, in any given field, this core is not static; scientific research continues to give rise to specialized fields of study, and new journals emerge as published research on new topics achieves critical mass. Editors determine if the content of a journal under evaluation will enrich the database, or if the topic is already adequately addressed by existing journals.
- **International Diversity**
  - Editors will also look for **international diversity** among the journal's contributing authors, editors, and editorial advisory board members. This is particularly important in journals targeting an international audience. Today's scientific research takes place in a global context, and an internationally diverse journal is more likely to have importance. Additionally, regional journals, which target a local rather than an international audience, are also considered. Editors select a relatively small proportion of such journals for inclusion, provided that they meet the editorial criteria and that their content will strengthen coverage of a given subject.

The process of journal selection is unique in that specialty editors have a wealth of **citation data to analyze**. Because the Web of Science™ Core Collection is a **True Citation Index**, all cited references from every item in every journal covered in the Web of Science™ Core Collection are indexed, irrespective of whether the work being cited is also covered as a source publication or not. Through the use of such data, it is possible to measure the citation impact of journals under evaluation.

Citation data, however, must be interpreted and understood correctly; a point that cannot be emphasized enough. Citation practices and patterns differ sharply between disciplines. Using quantitative citation data to measure impact is meaningful only in the context of journals in the same general discipline.

For example, smaller fields do not generate as many articles and citations as larger fields. In some areas, it may take a relatively long time for an article to attract a meaningful number of citations. But in other areas, it is not unusual for citations to accrue rapidly and peak after two or three years. These factors must be taken into account if citation data are to be used correctly.

For new journals that do not yet have citation history, editors examine the citation records of the journal's contributing authors and editorial board members, ascertaining whether the journal is able to attract contributions from scholars whose prior work has been useful to the research community.

In many instances, established journals that may be initially turned down for coverage are re-evaluated: subsequent to an earlier evaluation, these journals might have experienced new growth in citation impact resulting from such changes as translation into English, a shift in editorial focus, a change in publisher, a switch to a new medium of delivery, etc.

One citation-related factor that is constantly monitored is the rate of journal self-citation; this measure relates a journal's self-citations to the number of times it is cited by all journals, including itself.

There are journals in which the observed rate of self-citation is a dominant influence in the total level of citation. For these journals, self-citation threatens to distort the true role of the journal within the literature of its given field. Among all the journals listed in a recent annual edition of the Journal Citation reports science edition, 85 percent demonstrated journal self-citation rates of less than 15 percent.

The same criteria apply for all journals even if some attentions are taken when dealing with:

- **Social Sciences** journals: Standard citation metrics are analyzed while keeping in mind that overall citation rates in the social sciences are generally lower than those in the natural sciences. Regional studies have special importance in the Social Sciences, as topics of local rather than global interest are often the subject of scholarly research.
- **Arts & Humanities** journals: Publishing standards are important in the evaluation of arts and humanities journals. Citations patterns in the arts and humanities, however, do not necessarily follow the same predictable pattern as citations to social sciences and natural sciences articles. In addition, arts and humanities journal articles frequently reference non-journal sources (e.g., books, musical compositions, works of art, and literature). English-language text is not a requirement in some areas of arts and humanities scholarship where the national focus of the study precludes the need for it. An example of this is studies in regional or national literatures.

#### OTHER CONTENT: BOOKS AND PROCEEDINGS PAPERS

For what concerns the **Book Citation Index**, the currency of publication is an essential criterion in the evaluation process. In general, books selected for both the Sciences, Social Sciences& Humanities Editions must bear a copyright from the current year or previous five (5) years. However, books outside this range, especially in Social Sciences and Arts & Humanities subjects, are often considered for coverage with the understanding that older books in these areas are often of relatively greater value.

Full address information for all authors is highly desirable, and complete bibliographic information for all cited references is essential.

English language full text is highly desirable, but books with full text in a language other than English are also considered for coverage in Book Citation Index. Including English language Bibliographic information (e.g. chapter title, author abstract, keywords) in these cases is most helpful.

Book publishing involves a collaborative effort between Publishing Editor and Author, with authors typically invited to write on a certain subject. As with journals, a peer review process is also associated with scholarly books, and Clarivate Analytics relies on the integrity of the publisher to insure that book content is valid and original.

Book Citation Index covers only scholarly books that present fully referenced articles of original research, or reviews of the literature with the understanding that these books may be published in a wider variety of formats. Special consideration is given publications in the following list of book formats.

### **Dissertations**

- Dissertations are considered for coverage if they are part of an established book series with diverse content, or published as a well edited and reviewed monograph by a reputable scholarly publisher.

### **Textbooks**

- Well referenced textbooks aimed at a graduate or advanced research audience are considered for coverage.

### **Books in Series**

- Scholarly books in both series and non-series format are considered for coverage.

### **Reprinted /Reissued Content**

- Reissued content may be considered if it bears a current copyright date and has not been covered previously.
- Books containing reprinted content are generally not considered.

### **Translations and Non-English Content**

- Translations of non-English content are considered if they include significant, well-referenced, scholarly commentary.

### **Biography**

- Well referenced critical or scholarly biographies are considered.

### **Reference Books**

—Scholarly reference books where the items include cited references are considered. Priority is given to books and book series that have **relatively greater citation impact**. Book Citation Index now covers over 150 highly cited book series in Science, Social Science, and Arts & Humanities. Journal and proceedings citations to books in these series indicate that they are well-integrated into the scholarly communication network. The Book Citation Index uncovers another dimension of this network by opening citation pathways leading to and from publications in the wider world of books.

For what concerns the **Conference Proceedings Citation Index**, the proceedings papers published in journals are selectively covered from any of the over 12,000 journals covered in the Web of Science™ Core Collection.



Papers meet the following criteria:

1. The paper must be identified explicitly as having been presented at a specific conference.
2. Complete conference information must be present (Name, Date and Location of conference).
3. Meeting abstracts *are* selectively covered but only from a limited number of high-impact, high-frequency science journals. The great majority of these journals are from biomedical subject areas.

Conference proceedings published as books are acquired and selected according to a set of specialized guidelines. The Editors evaluate each conference proceedings volume according to a set of well-established criteria. They include the following:

1. **Basic Publishing Standards**

Editors examine each proceedings volume to insure that basic publishing standards are in place including sequential page numbering, timeliness, international editorial conventions such as fully descriptive article titles, and full cited references, author abstracts, and keywords.

2. **Content**

The overall quality of the research presented is assessed, as is the completeness of the cited references. In addition, the editors review the content to ensure that it enriches the coverage of a field or subfield, or of a geographic region, or that it completes the coverage of the output of a prestigious scholarly society or organization. **Priority is given to important serialized conferences sponsored by prestigious scholarly societies. The objective is to cover every instance of such conference series.**

3. **Copyright and Conference Date**

To ensure that the content of Conference Proceedings Citation Index is timely, published conference proceedings must fall into a specific date range.

- For scientific and technical proceedings, the meeting must have been held in the current or previous four years.
- In the social sciences and humanities, the time parameters are broader. All conference dates are accepted for social sciences and humanities proceedings so long as the volume is a first edition and not ever previously indexed.

These policies take into consideration the greater time sensitivity of information in natural sciences and technology subject areas and the somewhat less urgent time sensitivity of information in the social sciences and humanities.

4. **Conference Name and Location**

Proceedings literature must include the full name and location of the meeting.



## EDITORIAL PROCESS

The process of addition of new titles, and the deletion of those whose relevance and utility have diminished, constitutes the central activity of the specialists involved in journal selection<sup>24</sup>.

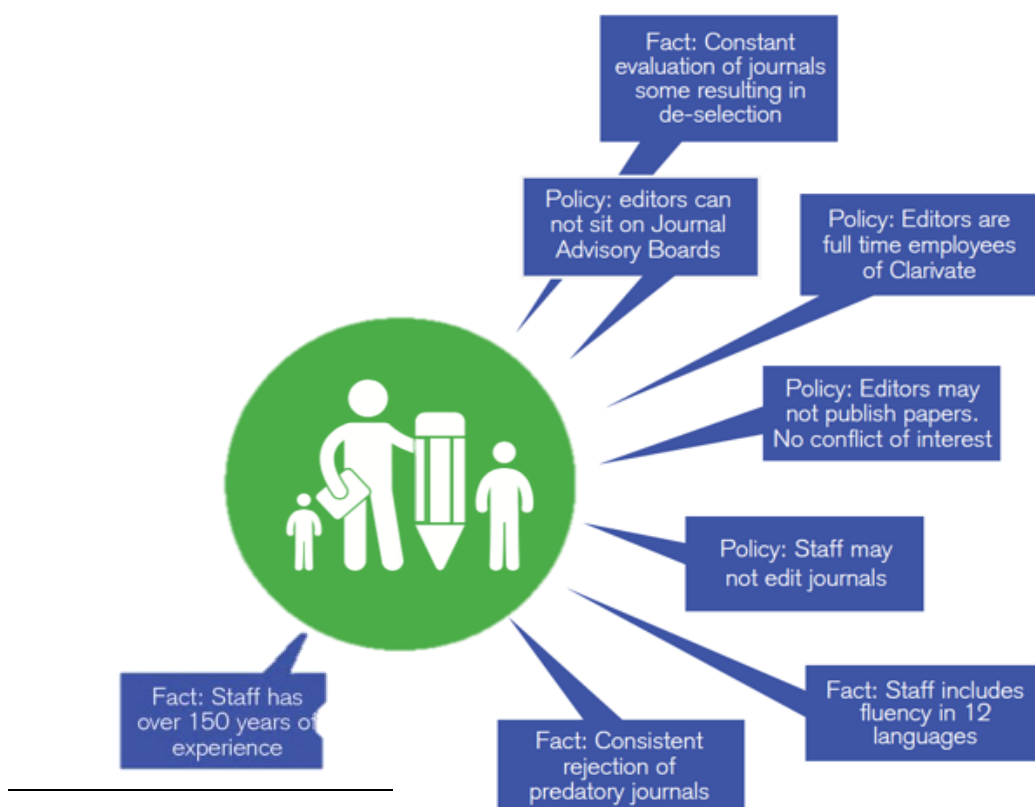
All Web of Science™ Core Collection content is directly selected by an **internal team**, comprised of **18 full time editors**.

All of them are **Clarivate Analytics employees** and none of them affiliated with a journal or a publisher, which ensures that the selection criteria are **publisher-neutral**.

All editors who perform journal evaluations have **educational backgrounds** relevant to their areas of responsibility: for instance Master's degrees in Information Science & Technology, Microbiology, Physiology, Biochemistry, Adult Education, Scientific & Technical Communication, Publication Management, French Literature, and Philology.

The editors are **fluent in 12 languages**: Chinese-Mandarin, Tagalog<sup>25</sup>, Portuguese, Italian, Spanish, Romanian, French, Catalan, Arabic, German, Russian, and English.

Last but not the least, there is continuous discussion about titles to be selected or removed: the **editorial team meets every two weeks** to take joint decisions on such matters.



<sup>24</sup> [clarivate.com/essays/journal-selection-process](https://clarivate.com/essays/journal-selection-process) for more information

<sup>25</sup> Tagalog is an Austronesian language with about 57 million speakers in the Philippines,

## CONTENT EXPANSION

Two key factors are emerged in the recent years with respect to the selection of content:

- The growing demand for **indexed content**, especially for research evaluation of emerging trends.
- The growing demand for **local (regional) content**, especially with regards to emerging countries. To maintain the historical selectivity of **Web of Science™** Core Collection and, at the same time, to give a response to the customer demand for more content, Clarivate Analytics has strategically chosen to build up several parallel indexes and databases.

## EMERGING SOURCES CITATION INDEX- AN EXPANSION OF WEB OF SCIENCE CORE

Emerging Sources Citation Index (ESCI), launched late in 2015, has extended the universe of publications in the Web of Science™ Core Collection to include high-quality, peer-reviewed publications of regional importance in emerging scientific fields. ESCI has also made visible in Web of Science™ Core Collection, content important to funders, key opinion leaders, and evaluators, even if these papers have not yet demonstrated citation impact on an international audience.

Journals in ESCI have passed an initial editorial evaluation and can continue to be considered for inclusion in products such as SCIE, SSCI, and AHCI, which have more rigorous evaluation processes and selection criteria. All ESCI journals are indexed according to the same data standards, including cover-to-cover indexing, cited reference indexing, subject category assignment, and indexing of all authors and addresses. ESCI titles can contribute to spot trends in a specific discipline and to identify potential collaborators for expanded research.

The acceptance rate is 60%.

After launching in 2015, several years later on Clarivate Analytics saw the potential to add depth to the ESCI front file by expanding coverage to include a **10 year back file**.

Currently the ESCI indexes over **7,200 journals**. To view the list of journals as indexed by the ESCI please visit: <http://mjl.clarivate.com/cgi-bin/jrnlst/jloptions.cgi?PC=EX>

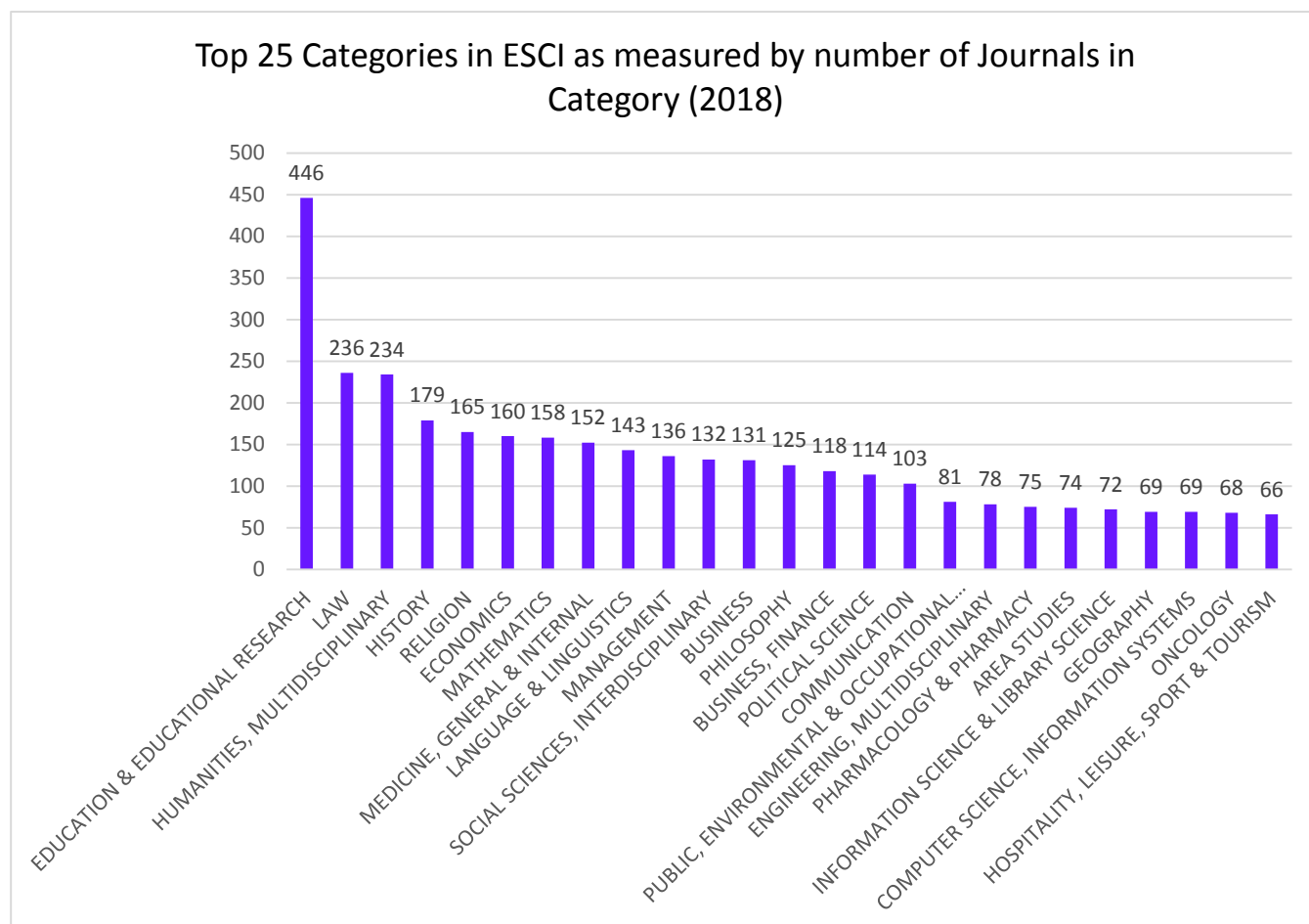
Citations from ESCI content are included in Web of Science **All Databases times cited counts**. A breakout of the citations from ESCI journals can be accessed via the 'Citation Score Card' view of the Web of Science full record.

ESCI journals are **not included in the Journal Citation Reports** and do not receive Impact Factors. The citations from ESCI will accrue to all articles in the Web of Science™ Core Collection and also contribute to the Journal Impact Factor numerator.

Citations from journals in ESCI are also **not included in the production of Essential Science Indicators**.

**ESCI 2005 to current year is available as a supplementary dataset** which can be analysed in Incites Benchmark and Analytics alongside the standard Incites dataset.

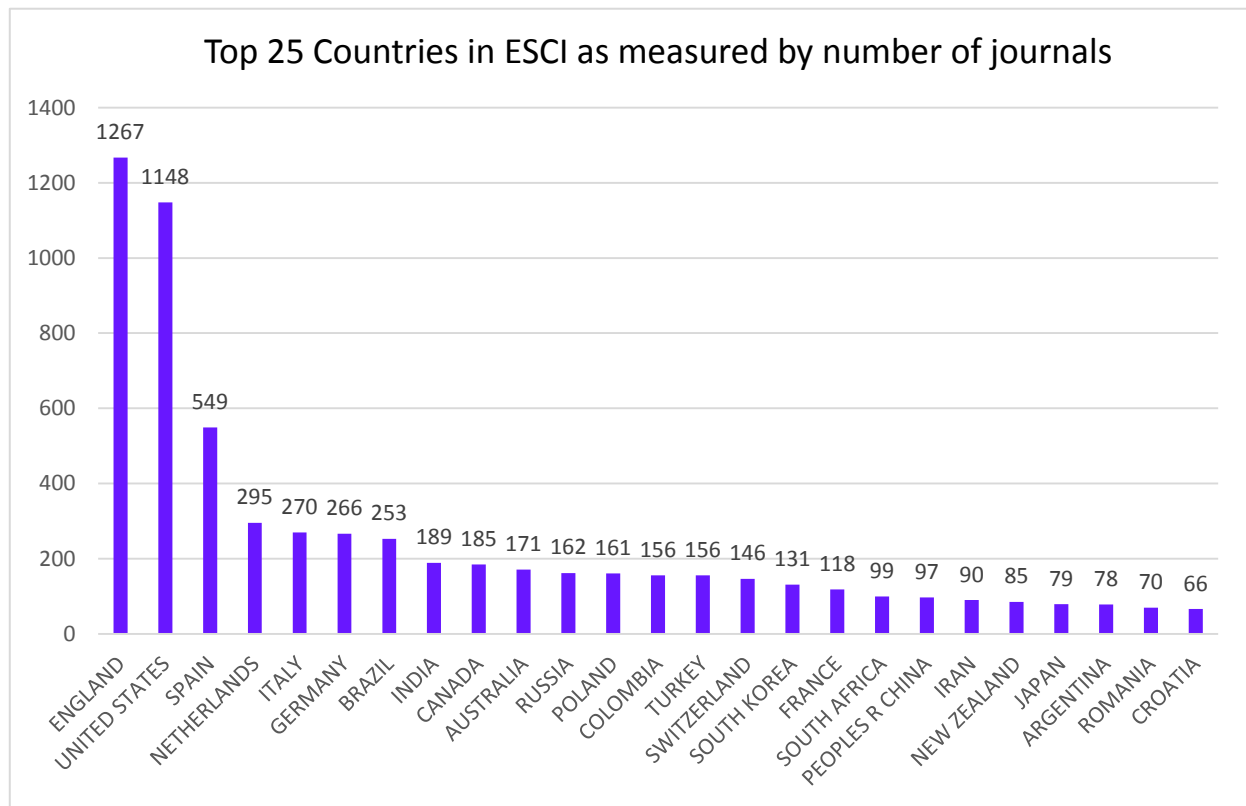
Graph below shows the top 25 categories in ESCI as measured by the number of journals classified in a specific category. Education and Educational research is the category with the largest number of journals. Currently there are 446 journals classified in this category.



The share of journals by access policy is as follows:

- 64% of content – Not Open Access
- 46% of content – Open Access

The geographic coverage is as follows:



## BIBLIOGRAPHIC SEARCH TYPES

The Web of Science™ Core Collection allows users to search the database<sup>26</sup> in 5 different ways:

Web of Science

Search

Tools ▾ Searches and alerts ▾ Search History Marked List

Select a database Web of Science Core Collection ▾ Learn More

Get one-click access to full-text

Basic Search Cited Reference Search Advanced Search Author Search Structure Search Less

Example: oil spill\* mediterranean × Topic Search Search tips

+ Add row | Reset

1. Basic Search
2. Cited Reference Search
3. Advanced Search
4. Author Search
5. Structure Search

## BASIC SEARCH

This standard search type allows users to search for source records by several criteria

Select a database Web of Science Core Collection ▾ Learn More

Basic Search Cited Reference Search Advanced Search + More

"zika virus" × Topic

And ▾ BRAZIL × Address Search Search tips

View Abbreviations List

Timespan

All years (1900 - 2018) ▾

More settings ▾

Year Published

Address

Organization-Enhanced

Conference


Language

Document Type

Funding Agency

<sup>26</sup> The current search engine uses Elastic Search

1	An implicit AND operator is considered when you enter two or more adjacent terms in most fields. Maximum 6,000 terms can be entered in a search query.
2	<p>Additional search fields can be added by selecting “add another field”. Search fields can be combined using standard Boolean operators (OR, AND, NOT).</p> <p>Maximum number of Boolean operators accepted for search field is 50. Maximum number of search sets is 99. If different operators (Boolean and proximity ones) are used in a search, the search is processed according to this order of precedence:</p> <p>NEAR/x SAME NOT AND OR</p> <p>Parentheses can be used to override operator precedence. Wildcards (*; \$; ?) are only valid in English-language search queries. Hyphens (-) and apostrophes (') are treated as spaces.</p>
3	<p>The Timespan options can be used to specify the time period to search. There are several options:</p> <p><b>All years</b> - Searches all years in the user subscription. This is the default timespan setting.</p> <p><b>Last 5 years</b> - Searches the current year and the previous four years (the years are publication years, not database years)</p> <p><b>Year to Date</b> - Searches the current year up to the last update to the product database. Only records with a <u>processing date</u> in the current year are included in the results.</p> <p><b>Last 4 weeks</b> - Searches the last four weeks of data entered in the product database (known as the processing date).</p> <p><b>Last 2 weeks</b> - Searches the last two weeks of data entered in the product database.</p> <p><b>Current week</b> - Searches the most recent week of data entered in the product database.</p> <p><b>From YYYY To YYYY</b> - Searches a range of database years based on the publication year. The default value (unless saved differently in “more settings”) is generally the earliest year in user subscription up to the date when the product database was last updated.</p>

	<p>Processing date (differently from publication date) is strongly dependent from publisher processes: “early arrivals” or “late arrivals” cannot be unusual.</p> <p><b>Web of Science™ Core Collection is updated daily</b></p>
	<p>“More settings” allows any registered user to select the subscribed indexes he/she wants to search: default configuration is all available indexes to be searched; “save settings” allows users to change the default.</p>

**More settings** ▲

Web of Science Core Collection: Citation Indexes

- ☒ Science Citation Index Expanded (SCI-EXPANDED) --1900-present
- ☒ Social Sciences Citation Index (SSCI) --1900-present
- ☒ Arts & Humanities Citation Index (A&HCI) --1975-present
- ☒ Conference Proceedings Citation Index- Science (CPCI-S) --1990-present
- ☒ Conference Proceedings Citation Index- Social Science & Humanities (CPCI-SSH) --1990-present
- ☒ Book Citation Index- Science (BKCI-S) --2005-present
- ☒ Book Citation Index- Social Sciences & Humanities (BKCI-SSH) --2005-present
- ☒ Emerging Sources Citation Index (ESCI) --2005-present

Web of Science Core Collection: Chemical Indexes

- ☒ Current Chemical Reactions (CCR-EXPANDED) --1985-present  
(Includes Institut National de la Propriete Industrielle structure data back to 1840)
- ☒ Index Chemicus (IC) --1993-present

Data last updated: 2018-08-14

Auto-suggest publication names

On ▼

Default Number of Search Fields to Display

1 field (Topic) ▼

(To save these permanently, sign in or register.)

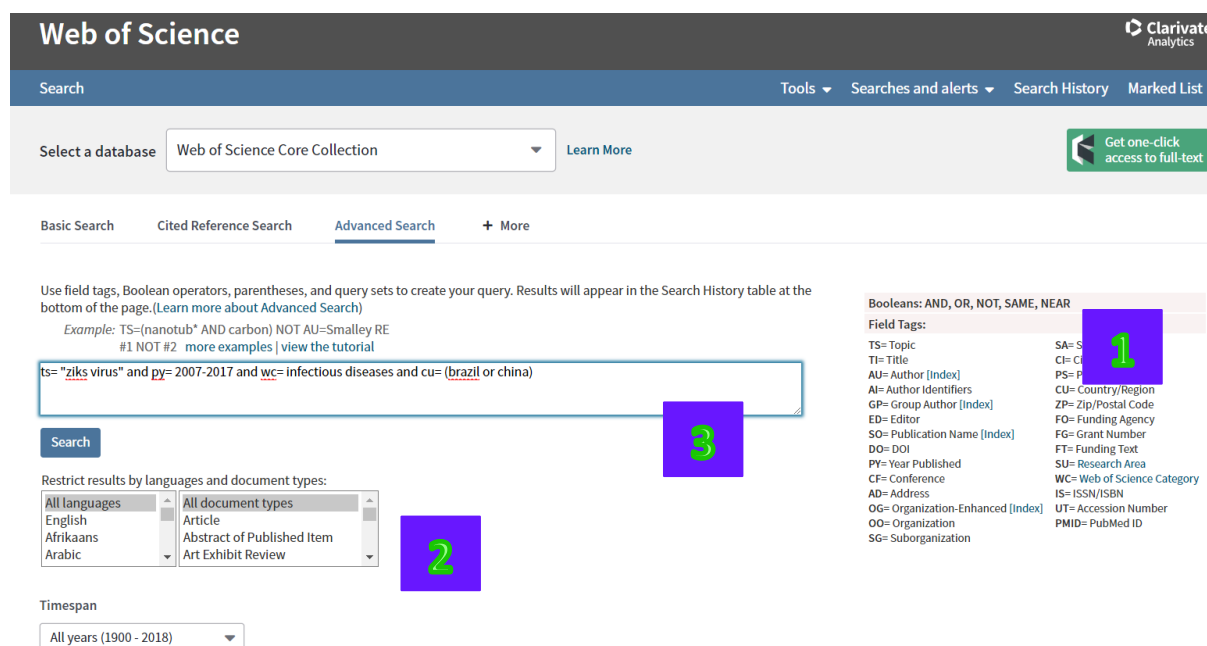
Apart selecting indexes and search fields, “more settings” can also be used to turn on the “auto-suggestion” function. The “auto-suggestion” function allows using:

- **“Did you mean”** - a spell checker to check search queries against common spellings and their variants in order to determine if an alternative spelling exists that would improve the search results.
- **“Auto-suggestion publication name”** - a feature that helps to quickly find publications by displaying journal names that may be similar to the one that is to be typed. Up to 10 suggestions (based on organization's subscription) will appear in the Publication Name field when a user types 3 characters without beginning spaces.

## ADVANCED SEARCH

The advanced search enhances user search capabilities:

- Increasing the number of search fields.
- Enabling to form and combine search sets
- Additional search fields not available in Basic search



**Web of Science**

Search Tools Searches and alerts Search History Marked List

Select a database Web of Science Core Collection Learn More

Get one-click access to full-text

Basic Search Cited Reference Search **Advanced Search** + More

Use field tags, Boolean operators, parentheses, and query sets to create your query. Results will appear in the Search History table at the bottom of the page. (Learn more about Advanced Search)

Example: TS=(nanotub\* AND carbon) NOT AU=Smalley RE #1 NOT #2 more examples | view the tutorial

ts="zika virus" and py=2007-2017 and wc= infectious diseases and cu= (brazil or china)

Search

Restrict results by languages and document types:

All languages English Afrikaans Arabic

All document types Article Abstract of Published Item Art Exhibit Review

Timespan All years (1900 - 2018)

Field Tags:

Booleans: AND, OR, NOT, SAME, NEAR

TS= Topic  
TI= Title  
AU= Author [Index]  
AI= Author Identifiers  
GP= Group Author [Index]  
ED= Editor  
SO= Publication Name [Index]  
DOI= DOI  
PY= Year Published  
CF= Conference  
AD= Address  
OG= Organization-Enhanced [Index]  
OO= Organization  
SG= Suborganization

SA= Subject  
CI= Country  
PS= Place  
CU= Country/Region  
ZP= Zip/Postal Code  
FO= Funding Agency  
FG= Grant Number  
FT= Funding Text  
SU= Research Area  
WC= Web of Science Category  
IS= ISSN/ISBN  
UT= Accession Number  
PMID= PubMed ID

<p>1</p>	<p>Search fields that are not found in the “basic search” and are unique for the Advanced search include:</p> <p>ISSN/ISBN</p> <p><b>Web of Science categories</b></p> <p><b>Research Areas<sup>27</sup></b></p> <p>Funding Text</p> <p>Sub address fields (<b>Country</b>, City, Province, Zip Code, Street Address)</p>
<p>2</p>	<p>Any advanced search can be refined by language (full-text language) or document types.</p>

<sup>27</sup> Full list of Research Areas in Appendix E



3	Search can be combined in two different ways: using strings of field tags (in case using parenthesis) connected via Boolean operators or using the search sets and combining them. Once a search is performed, the query is temporarily stored (can be saved and re-used) in the “search history” tab appearing at the bottom of the “advanced search” page (see below)
---	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

The screenshot shows the 'Search History' table with two rows of search results. Row #2 has 543,025 results for the query 'CU= israel'. Row #1 has 6,697 results for the query 'TOPIC: ("whole exome sequencing")'. Annotations 4 and 5 point to the 'Combine Sets' and 'Delete Sets' buttons respectively, which are located to the right of the search results.

Once two search sets need to be combined (ex. with an AND operator), the combine set box can be used (see 4) or alternatively users can type in the text box (see below)

The result, in both cases, will be the same (see below):

The screenshot shows the 'Advanced Search' page. At the top, there is a text box where a search query is entered. Below the text box, there are buttons for 'Search' and 'Restrict results by languages and document types'. To the right of the search box, there is a table of 'Field Tags' and 'Booleans'. Below the search box, there is a 'Search History' table. The 'Search History' table shows the results of the search, including the query used and the number of results. The 'Search History' table has columns for 'Set', 'Results', and 'Query'. The 'Search History' table shows that the search for '#1 and #2' resulted in 243 results. The 'Search History' table also shows the queries for the other two sets, #2 and #1.

Sets can also be edited or deleted (see 5).

## CITED REFERENCE SEARCH

This search type is one of the core functions of Web of Science™ Core Collection. In 2018 the number of **cited references** exceeded 1,311,842,856<sup>28</sup>.

The Web of Science™ Core Collection is a true citation index and citations are indexed separately from source articles. This allows a unique method of discovery through the cited reference search (searching against the cited reference separate index<sup>29</sup>), simply not possible in other literature databases.

**Citations**<sup>30</sup> are entries in bibliographies; **cited items** are external real-world items identified by citations. **Citations** are counted for each and every entry in a source item bibliography; **cited items** are counted once without regard to the number of times they have been cited. Cited items can be either source items in the Web of Science platform or published items outside the scope of WOS content. Most citations are made to WOS source items and are linked. Citations are counted by the total number of works that appear in source item bibliographies. Cited items are counted by the number of distinct external works (clusters) identified by citations in source item bibliographies. The following chart is based on all WOS content.

Statistic	WOS Core Collection	WOS Platform
<b>Citations linked to WOS source items</b>	723 million	768 million
<b>Citations not linked to WOS sources</b>	354 million	365 million
Total citations	<b>1,077 million</b>	1,133 million
<b>Cited items in WOS source content</b>	33 million	42 million
<b>Cited items not in WOS content</b>	177 million	186 million
Total cited items	<b>210 million</b>	228 million

<sup>28</sup> 1,311,842,856 citations found in bibliographies of articles indexed by the Web of Science Core Collection (June 2018)

<sup>29</sup> Citation search in Scopus only covers the titles included in the database

<sup>30</sup> "<https://thelens.clarivate.com/groups/ssr-technology/blog/2015/03/03/counting-citations-and-cited-source-items-in-the-wos-platform>" by D. Toliver, Feb 2014

The Cited reference search allows searching for records that have cited a published work (see below)

The screenshot shows the 'Cited Reference Search' tab selected. It includes a database selector set to 'Web of Science Core Collection'. Below the tabs, instructions state: 'Find the articles that cite a person's work. Step 1: Enter information about the cited work. Fields are combined with the Boolean AND operator. \* Note: Entering the title, issue, or page in combination with other fields may reduce the number of cited reference variants found.' The search fields are: 'guernica\*' (labeled with a green '2' and an arrow pointing to the 'Cited Work' dropdown), 'picasso\*' (labeled with a green '2' and an arrow pointing to the 'Cited Author' dropdown), and 'Example: 1943 or 1943-1945' (labeled with a green '1' and an arrow pointing to the 'Cited Year(s)' dropdown). A 'Search' button is at the bottom right, along with '+ Add row' and 'Reset' links. A 'Learn More' link is also present.

Even in the case of cited reference search, all successfully searches are added to the search history.

In the **Arts & Humanities Citation Index**, cited reference searching enables user to find articles that refer to and/or include an illustration of a work of art or a music score. These references are called **implicit citations**.

Fields in the search are combined via the AND operator.

The Cited Reference Search fields are:

This screenshot shows the dropdown menu for the 'Cited Author' field. The menu lists the following options: 'Cited Author', 'Cited Work', 'Cited DOI', 'Cited Year(s)', 'Cited Volume\*', 'Cited Issue\*', 'Cited Pages\*', and 'Cited Title\*'. The 'Cited Author' option is currently selected. The search fields 'guernica\*' and 'picasso\*' are visible in the background, along with a 'Search' button.

**1** Author, Cited Work and Cited years are the default search fields

**2** Cited Author and Cited Work, an index is available (see below)

## Web of Science

### Cited Author Index

Use the Browse feature to locate primary cited authors to add to your query.

Click on a letter or type a few letters from the beginning of the name to browse alphabetically by author.

Example: Johan to jump to entries which begin with JOHAN

Move To

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z 0 1 2 3 4 5 6 7 8 9

### Cited Work List

Use the Browse feature to locate cited works to add to your query.

Click on a letter or type a few letters from the beginning of the title to browse alphabetically by title.

Example: ceram to jump to entries which begin with CERAM

Move To

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z 0 1 2 3 4 5 6 7 8 9

Page Range: GUERNICA -- GUERNICA AUTOBIOGRAP

Next

Records	Add to Query	Cited Work
68	Add	GUERNICA
1	Add	GUERNICA 0111
2	Add	GUERNICA 0115
1	Add	GUERNICA 0116
1	Add	GUERNICA 0201
3	Add	GUERNICA 0203
1	Add	GUERNICA 0206
1	Add	GUERNICA 0215
1	Add	GUERNICA 0301
1	Add	GUERNICA 0302

Transfer your selected term(s) below to the Cited Work field on the search page.

OK

Cancel

For cited work, Journal abbreviations can also be used: check abbreviations at [http://images.webofknowledge.com/WOKRS520B4.1/help/WOS/A\\_abrvjt.html](http://images.webofknowledge.com/WOKRS520B4.1/help/WOS/A_abrvjt.html)

Cited Reference Search is mainly used for two main purposes:

- **Find citations to items not indexed in the Web of Science.**

Citations to documents not indexed in Web of Science™ Core Collection can also be retrieved. This function can be used to assess the value of non-indexed journals as well to support the evaluation of a paper.

- **Find cited reference variants**

Every cited reference in the Cited Reference Index contains enough information to uniquely identify the document. Because only essential bibliographic information is captured, and because author names and source publication titles are unified as much as possible, the same reference cited in two different records should appear the same way in the database. This unification is what makes possible the Times Cited number on the Full Record page. However, not all references to the same publication can be unified. As a consequence, a cited reference may have variations in the product. For example, consider variations of a reference to an article by Anand K, published in the journal Science, 2003, volume 300, issue 5636

\* "Select All" adds the first 1000 matches to your cited reference search, not all matches.

Select Page Select All \* Clear Export Table Finish Search

Select	Cited Author	Cited Work [Expand Titles]	Title [Expand Titles]	Year	Volume	Issue	Page	Identifier	Citing Articles **
<input type="checkbox"/>	Anand, K + [Show all authors]	SCIENCE	Coronavirus main proteinase (3CL(pro)) structure:...	2003	300	5626	1763	DOI: 10.1126/scie nce.1085658	455
<input type="checkbox"/>	ANAND K	SCIENCE		2003	300		1463		1
<input type="checkbox"/>	ANAND K	SCIENCE		2003	13		13		1
<input type="checkbox"/>	ANAND K	SCIENCE		2003					3
<input type="checkbox"/>	ANAND K	SCIENCE							1
<input type="checkbox"/>	ANAND K	SCIENCE 0513		2003					2
<input type="checkbox"/>	ANAND K	SCIENCE 1305		2003					1
<input type="checkbox"/>	ANAND K	SCIENCEEXPRESS		2003					1

Select Page Select All \* Clear Export Table Finish Search

The first reference listed contains the correct volume number (300) and other correct bibliographic information. The tables indicates that 455 references cite the same bibliographic information. By clicking on the number of citing articles, you will retrieve the papers that have cited the reference correctly (Times Cited Count).

The references listed below are referred to as citation variants. These contain incorrect or incomplete bibliographic information and therefore do not contribute to the Times Cited Count of a source item. To include the citation variants in the citing articles count, you can manually select the references or select page or select all (\*adds first 1000 matches) and Finish the search. The subsequent results will be all the papers that have cited an item of work and therefore a more realistic reflection of impact of research.

## AUTHOR SEARCH

Users that want to search for an author and their publications can make use of the "Author Search" function.

The disambiguation of author names is a challenge for all databases and in some cases there is no automatic solution.

For instance, looking at the Asian names, any disambiguation algorithm has to tackle indistinguishable **block names** (last name + initial of the first name), corresponding to thousands of authors.

Below is an analysis of Author names from Incites B&A using the Incites dataset (WOS Core, 1980-2018).

Name	Web of Science Documents
[Anonymous]	812,129
Suzuki, T	15,933
Tanaka, K	13,290
Wang, Y	13,238
Suzuki, K	12,309
Wang, J	12,307
Nakamura, T	12,068
Watanabe, T	11,546
Tanaka, T	11,227
Yamamoto, T	11,021

As a matter of fact large (huge) bibliographic databases often fail to distinguish authors with similar names, especially because they have to scale up algorithms to millions of articles.

The Web of Science™ Core Collection, has made use of the **DAIS – Distinct Author Identification System**, recently redesigned and strengthened (**DAIS-NG, Next Generation**) since 2008

The DAIS NG is based on four steps:

- initial clustering;
- assign author ids;
- RID integration where available;
- Re-evaluation.

For **initial clustering**, DAIS uses 25 “weighted” data points (see picture on next page)

**Bulk metallic glasses**

By: Wang, WH (Wang, WH); Dong, C (Dong, C); Shek, CH (Shek, CH)  
Hide ResearcherID and ORCID

Author	ResearcherID	ORCID Number
SHEK, Chan Hung	J-3857-2015	<a href="http://orcid.org/0000-0002-6870-523X">http://orcid.org/0000-0002-6870-523X</a>

MATERIALS SCIENCE & ENGINEERING R-REPORTS  
Volume: 44 Issue: 2-3 Pages: 45-89  
DOI: 10.1016/j.mser.2004.03.001  
Published: JUN 1 2004  
Document Type: Review  
[View Journal Impact](#)

**Abstract**  
Amorphous alloys were first developed over 40 years ago and found applications as magnetic core or reinforcement added to other materials. The scope of applications is limited due to the small thickness in the region of only tens of microns. The research effort in the past two decades, mainly pioneered by a Japanese- and a US-group of scientists, has substantially relaxed this size constrain. Some bulk metallic glasses can have tensile strength up to 3000 MPa with good corrosion resistance, reasonable toughness, low internal friction and good processability. Bulk metallic glasses are now being used in consumer electronic industries, sporting goods industries, etc. In this paper, the authors reviewed the recent developments in alloy systems of bulk metallic glasses. The properties and processing technologies relevant to the industrial applications are discussed here. The behaviors of bulk metallic glasses under extreme conditions such as high pressure and high temperature are discussed in this review. In order that the scope of applications can be broadened, the understanding of the glass transition and the formation of new alloy systems and also the processing techniques. (C) 2004 Elsevier B.V. All rights reserved.

**Keywords**  
Author Keywords: bulk metallic glass; glass-forming ability; crystallization; high pressure techniques  
KeyWords Plus: SOFT-MAGNETIC PROPERTIES; SUPERCOOLED LIQUID REGION; CRITICAL COOLING RATES; NI AMORPHOUS-ALLOYS; B-SI ALLOYS; HIGH-PRESSURE; THERMAL-STABILITY; ELASTIC-CONSTANTS; FORMING ABILITY; ZR-NI ALLOYS

**Author Information**  
Reprint Address: Shek, CH (reprint author)  
City Univ Hong Kong, Dept Phys & Mat Sci, Kowloon, Hong Kong, Peoples R China.  
Addresses:  
[1] City Univ Hong Kong, Dept Phys & Mat Sci, Kowloon, Hong Kong, Peoples R China  
[2] Chinese Acad Sci, Inst Phys, Beijing 100080, Peoples R China  
[3] Dalian Univ Technol, State Key Lab Mat Modificat, Dalian 116024, Peoples R China  
[4] Dalian Univ Technol, Dept Mat Engn, Dalian 116024, Peoples R China  
E-mail Addresses: apchshek@cityu.edu.hk

**Publisher**  
ELSEVIER SCIENCE SA, PO BOX 564, AMSTERDAM, NETHERLANDS

**Journal Information**  
Table of Contents: [Current Contents](#)  
Impact Factor: [Journal Citation Reports](#)

**Categories / Classification**  
Research Areas: Materials Science; Physics  
Web of Science Categories: Materials Science, Multidisciplinary; Physics, Applied

[See more data fields](#)

**Citation Network**  
In Web of Science Core Collection  
**1,692**  
Times Cited  
[Create Citation Alert](#)

**All Times Cited Counts**  
**1,815** in All Databases  
[See more counts](#)

**182**  
Cited References  
[View Related Records](#)

**Most recently cited by:**  
Xu, Zhiqiang; Xu, Yifei; Zhan, An; et al. Oxidation of amorphous alloys. JOURNAL OF MATERIALS SCIENCE & TECHNOLOGY (2018)  
Wang, Jingfeng; Ma, Yao; Guo, Shengfeng; et al. Effect of Sr on the microstructure and biodegradable behavior of Mg-Zn-Ca-Mn alloys for implant application. MATERIALS & DESIGN (2019)  
[View All](#)

**Use in Web of Science**  
Web of Science Usage Count  
**66** **911**  
Last 180 Days Since 2013  
[Learn more](#)

**This record is from:**  
Web of Science Core Collection  
- Science Citation Index Expanded

[Suggest a correction](#)  
If you would like to improve the quality of the data in this record, please suggest a correction.

**Author and Co authors**  
Full name from other collections

**ORCID & ResearcherID**

**Journal, publication year and language**

**Cited author, journals, keywords, language, category**

**keywords**

**Addresses**  
-institution  
-city  
-Country

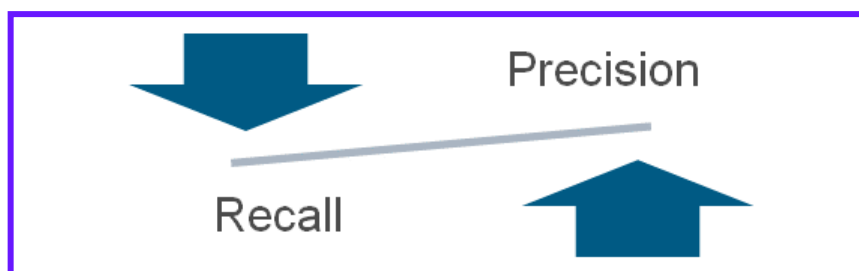
**Email**

**Category**

**Citing authors, journals, keywords, languages, categories**

Author clustering<sup>31</sup>, is the result of programs that evaluate pairs for linking.

If the programs are tuned for precision (reduce false-positive links) then some links that should be made are not (Items are only included in a set if there is a very precise match, 99% certainty, and many items that should be included in a set are missed). But if the programs are not tuned for precision, they generate false positives – “clumping”<sup>32</sup>. A trade-off is required: **DAIS is rule-based but has to be hand-tuned.**



It's worthy to be mentioned that, as a results of a deep survey, lead on Web of Science™ Core Collection, on October 2014, more than 170 million of authorships (Name in Context – NiC) have been found out;

43% of authorships have first initial only (not full first name) and it has been calculated that, to examine all pairs, 513 years of runtime would be needed.

As new data come into the database, the system **assigns an Author ID** and compares the new author with clustered ones. The automated system does NOT work if the original author name did not meet the clustering criteria. Two authorships that do not match, will NOT be identified as the same author (same author id).

Every 3 months (quarterly), data will be re-clustered.

The **RID author identifier check**, when available, is done comparing author ID publication with RID Profile. RID profile overwrites DAIS founding. Typically, a fresh, full clustering on a per name basis (**re-evaluation**), can help to discover new authors not known at the time of the initial clustering

The author search is working on clusters and is supporting users allowing them to refine and filter via research areas (first step) and/or organizations / organization enhanced (second step):

---

<sup>31</sup> Cluster ID is currently available in the WoS API (will be exposed within WoS platform in a future release)

<sup>32</sup> Precision: [0.0 -1.0] measure of how well a clustering separates authorships of authors known to be different (resist clumping = fewer “massive clusters”)

Recall: [0.0 -1.0] measure of how well a clustering unifies authorships known to belong to a single author (resist splitting = fewer “singletons”)



## Web of Science

### Search

Select a database: Web of Science Core Collection [Learn More](#)

Basic Search   Cited Reference Search   Advanced Search   **Author Search**   Structure Search

Enter Author Name   Select Research Domain   Select Organization

Last Name / Family Name (Required):  Initial(s) (Up to 4 allowed):  ☐ Exact Matches Only [?](#)

OR Last Name / Family Name (Required):  Initial(s) (Up to 4 allowed):  ☐ Exact Matches Only [?](#)

OR Last Name / Family Name (Required):  Initial(s) (Up to 4 allowed):  ☐ Exact Matches Only [?](#)

[+ Add Author Name Variant](#) | [Reset Form](#)

[Select Research Domain](#) [Finish Search](#)

Step one: Enter author name including all variants

### Author Search

Enter Author Name   Select Research Domain   Select Organization

Current selection(s): berro eg\* OR garcia berro e\* OR garciaberro e\* (293)

[Previous](#) [Search](#)

Select the research domains associated with the author (optional)

Research Domain	Record Count
<input type="checkbox"/> All Research Domains	293
<input type="checkbox"/> LIFE SCIENCES BIOMEDICINE	5
<input checked="" type="checkbox"/> PHYSICAL SCIENCES	276
<input checked="" type="checkbox"/> ASTRONOMY ASTROPHYSICS(259)	<input checked="" type="checkbox"/> OPTICS(8)
<input checked="" type="checkbox"/> MATHEMATICS(2)	<input checked="" type="checkbox"/> PHYSICS(31)
<input type="checkbox"/> SOCIAL SCIENCES	4
<input type="checkbox"/> TECHNOLOGY	23

[Previous](#) [Select Organization](#) [Finish Search](#)

Step Two: select the relevant research domains (broad) or web of science categories (narrow)

### Author Search

Enter Author Name   Select Research Domain   Select Organization

Current selection(s): berro eg\* OR garcia berro e\* OR garciaberro e\* (293), in PHYSICAL SCIENCES OR Multidisciplinary Sciences (2)

[Previous](#) [Finish Search](#)

Select the organizations associated with the author (optional)

Organization Name Abbreviation	Record Count
<input checked="" type="checkbox"/> POLYTECHNIC UNIVERSITY OF CATALONIA	242
<input type="checkbox"/> INSTITUT D ESTUDIS ESPACIALS DE CATALUNYA IEEC	214
<input type="checkbox"/> CONSEJO SUPERIOR DE INVESTIGACIONES CIENTIFICAS CSIC	126
<input type="checkbox"/> CSIC INSTITUTO DE CIENCIAS DEL ESPACIO ICE	71
<input type="checkbox"/> NATIONAL UNIVERSITY OF LA PLATA	71
<input type="checkbox"/> CONSEJO NACIONAL DE INVESTIGACIONES CIENTIFICAS Y TECNICAS CONICET	46
<input type="checkbox"/> UNIVERSITY OF BARCELONA	38

☐ Include records that do not contain organization information

Click on Finish search to view results

Step three: Select the organisations associated with the author

## CHEMICAL STRUCTURE SEARCH

Through the Structure Search, in Web of Science™ Core Collection, users subscribing the Index Chemicus (IC) and the Current Chemical Reactions (CCR-Expanded) can:

- Search for **chemical compounds and reactions** that match a structure query created using the **Accelrys JDraw applet**.
- Search for **data associated with compounds and reactions** by entering appropriate search terms in the Compound and Reaction text fields.
- Search for **compound or reaction data without doing a structure search** by entering search terms in the Compound Data and Reaction Data text fields.

Enter a Structure Drawing and/or any desired data. Then click either SEARCH button to process your query. The search will be added to the search history.

---

**Structure Drawing**  
Click the structure drawing option to create a structure and insert it into the Query box below. Then select a search mode.

☒ Substructure  
☐ Exact Match

E

C

N

O

S

H

F

Cl

Br

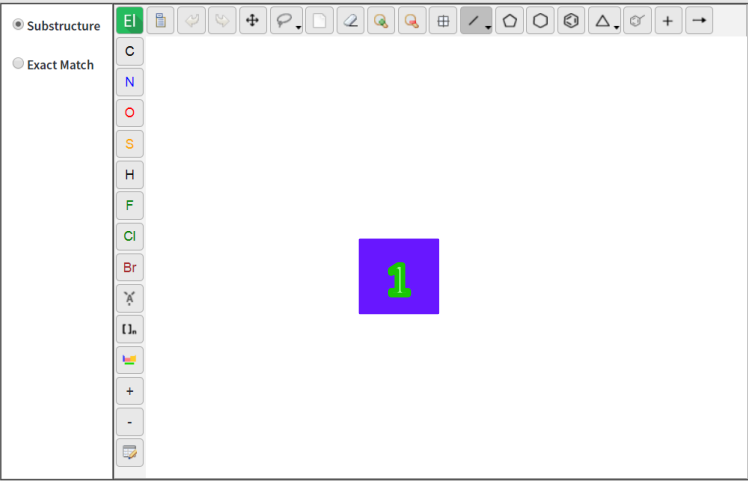
X

I

+

-

⏏



---

**Compound Data**  
Enter a compound name, biological activity and/or molecular weight. Use the checkboxes to specify a role.

Compound Name:

Compound Biol. Act.:  [Biological Activity List](#)

Molecular Weight:

☐ as Reactant ☐ as Product ☐ as Catalyst ☐ as Solvent

**Reaction Data**  
Enter any reaction conditions to be searched, along with desired reaction keyphrases or comments.

Atmosphere:

Other:  [Terms List](#)

Pressure (Atm):

Time (Hrs):

Temperature (C):

Product Yield:

Reaction Keyphrases:  [Keyphrase List](#)

Reaction Comments:

The Chemical Search page is indeed divided into three sections:

1. Structure Drawing
2. Compound Data
3. Reaction Data

Structure drawing is only possible using **Accelrys JDraw applet**. If the applet doesn't show up while accessing the Structure Search page, then Java must be downloaded in the machine in order to create chemical structures.

When a user formulated a structure search, the system may create two sets of results: a set of reaction records and a set of compound records. In this case, the same structure query is listed twice in the search history table. A substructure search for a compound might find 25 compounds and 10 reactions. The 25 compounds belong to one set and the 10 reactions to another set. Users can save both sets to a save history file to use later. Any chemical structures created are also saved to the history file.

For searching compound (or reaction) data some rules apply:

- System uses an implicit AND operator when user enters two or more adjacent chemical terms in the same field or when user has initiated a search in which has entered chemical terms in multiple search fields.
- User has to enclose terms in quotation marks if wishes to search for exact chemical phrases.
- User doesn't have to use parentheses in search queries.

Search Compound data fields are:

The screenshot shows the 'Compound Data' search interface. It includes three input fields: 'Compound Name', 'Compound Biol. Act.', and 'Molecular Weight'. The 'Compound Name' field has a callout '1' pointing to its right side. The 'Compound Biol. Act.' field has a callout '2' pointing to its right side and a link 'Biological Activity List' to its right. The 'Molecular Weight' field has a callout '3' pointing to its right side. Below these fields are four checkboxes: 'as Reactant', 'as Product', 'as Catalyst', and 'as Solvent'.

### 1. Compound Name

The name of a compound can be entered without a prefix.

Characters such as +/- cannot be used. The Implicit AND operator is used by the search engine.

Hyphenated terms can be entered with or without the hyphen.

Exact chemical phrases can be searched enclosing terms within quotation marks ( " " ).

## 2. Compound Biological Activity.

The Biological Activity List links to a search aid where user can search for a biological activity to add to the search. The Implicit AND operator is used by the search engine.

Hyphenated terms can be entered with or without the hyphen.

## 3. Molecular Weight

A single value can be entered, provided it is preceded by the greater than (>) or less than (<) sign. User can also use the  $\geq$  and  $\leq$  relational operators.

Search Reaction data fields are:

The screenshot shows a 'Reaction Data' search form. At the top, it says 'Enter any reaction conditions to be searched, along with desired reaction keyphrases or comments.' Below this are several input fields, each with a numbered callout in a blue box:

- 1**: Points to the 'Atmosphere:' dropdown menu.
- 2**: Points to the 'Refluxed Flag' checkbox.
- 3**: Points to the 'Other:' text input field.
- 4**: Points to the 'Pressure (Atm):' dropdown menu.
- 5**: Points to the 'Time (Hrs):' dropdown menu.
- 6**: Points to the 'Temperature (C):' dropdown menu.
- 7**: Points to the 'Product Yield:' dropdown menu.
- 8**: Points to the 'Reaction Keyphrases:' text input field.
- 9**: Points to the 'Reaction Comments:' text input field.

There are also two links: 'Terms List' next to the 'Other:' field and 'Keyphrase List' next to the 'Reaction Keyphrases:' field.

### 1. Atmosphere

Possible values from menu: Any, Air, O<sub>2</sub>, N<sub>2</sub>, H<sub>2</sub>, He, Ar, CO, CH<sub>4</sub>, or CO<sub>2</sub>.

### 2. Refluxed Flag

User can check the box to retrieve reactions that have been flagged as refluxed. The default setting is left unchecked, which means reactions are retrieved regardless of the contents of the refluxed flag.

### 3. Other

User can retrieve reactions based upon conditions that do not fit into the other Reaction Data fields.

### 4. Pressure (ATM)

User can select a relational operator from the menu, and then enter a single value in Atm.

### 5. Time (Hrs)

User can select a relational operator from the menu, and then enter a single value in Hours.

### 6. Temperature (C)

User can select a relational operator from the menu, and then enter a single value in Hours.

## 7. Product Yield

User can retrieve records based on the product yield as expressed as a percentage. User can select a relational operator from the menu, and then enter a single value in percent.

## 8. Reaction Key phrases

Key phrases identify:

- General reaction classes
- Named reactions
- New catalysts and reagents
- Total syntheses

User can click the Key phrase List link to go to a search aid where can search for meaningful key phrases to add to the search.

The Implicit AND operator is used by the search engine.

Hyphenated terms can be entered with or without the hyphen.

Exact chemical phrases can be searched enclosing terms within quotation marks ( " " ).

## 9. Reaction Comments

Comments can include advantages, limitations, warnings, and other qualitative data. The system searches the Reaction Comments field within a record.

The Implicit AND operator is used by the search engine.

Hyphenated terms can be entered with or without the hyphen.

Exact chemical phrases can be searched enclosing terms within quotation marks ( " " ).

## BASIC SEARCH

Basic search allows user to search for 18 different fields

### 1. TOPIC

Searching words or phrases in the topic search field, means searching for those words or phrases (at the same time) in:

- Title
- Abstract
- Author Keyword
- Keyword Plus

**Web of Science**

Search Tools ▾ Searches and alerts ▾

Select a database Web of Science Core Collection ▾ [Learn More](#)

Basic Search Cited Reference Search Advanced Search + More

Topic ▾

And ▾  Topic ▾ Search Search tips

[+ Add row](#) [Reset](#)

---

**Whole Exome Sequencing in Pediatric Neurology Patients: Clinical Implications and Estimated Cost Analysis**

By: Nolan, D (Nolan, Danielle)<sup>1,2</sup>; Carlson, M (Carlson, Martha)<sup>1,2</sup>  
[View ResearcherID and ORCID](#)

JOURNAL OF CHILD NEUROLOGY  
 Volume: 31 Issue: 7 Pages: 887-894  
 DOI: 10.1177/0883073815627880  
 Published: JUN 2016  
 Document Type: Article  
[View Journal Impact](#)

**Abstract**

Genetic heterogeneity in neurologic disorders has been an obstacle to phenotype-based diagnostic testing. The authors hypothesized that information compiled via whole exome sequencing will improve clinical diagnosis and management of pediatric neurology patients. The authors performed a retrospective chart review of patients evaluated in the University of Michigan Pediatric Neurology Clinic between 6/2011 and 6/2015. The authors recorded previous diagnostic testing, indications for whole exome sequencing, and whole exome sequencing results. Whole exome sequencing was recommended for 135 patients and obtained in 53 patients. Insurance barriers often precluded whole exome sequencing. The most common indication for whole exome sequencing was neurodevelopmental disorders. Whole exome sequencing improved the presumptive diagnostic rate in the patient cohort from 25% to 48%. Clinical implications included family planning, medication selection, and systemic investigation. Compared to current second tier testing, whole exome sequencing can result in lower long-term charges and more timely diagnosis. Overcoming barriers related to whole exome sequencing insurance authorization could allow for more efficient and fruitful diagnostic neurological evaluations.

**Keywords**

Author Keywords: pediatric neurology; whole exome sequencing; whole exome sequencing; developmental delay; cost  
 KeyWords Plus: CHILD

**Author Information**

Reprint Address: Nolan, D (reprint author)  
 + Univ Michigan, Dept Pediat & Communicable Dis, Mott Hosp, 1540 E Hosp Dr, Rm 12-733, Ann Arbor, MI 48109 USA.  
 Addresses:  
 + [1] Univ Michigan, Dept Pediat & Communicable Dis, Ann Arbor, MI 48109 USA  
 E-mail Addresses: danstett@med.umich.edu

**Citation Network**

In Web of Science Core Collection

**12**  
 Times Cited  
[Create Citation Alert](#)

**All Times Cited Counts**

12 in All Databases  
[See more counts](#)

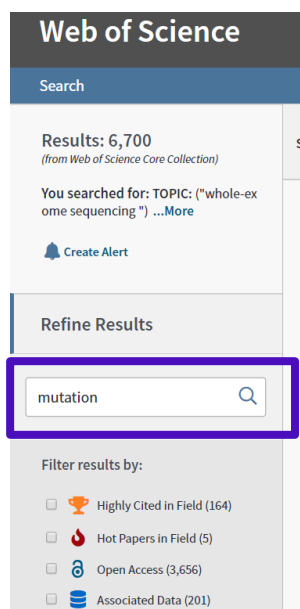
**11**  
 Cited References  
[View Related Records](#)

**Most recently cited by:**

Goodspeed, Kimberly; Newsom, Cassandra; Morris, Mary Ann; et al. Pitt-Hopkins Syndrome: A Review of Current Literature, Clinical Approach, and 23-Patient Case Series. JOURNAL OF CHILD NEUROLOGY (2018)  
 Otter, Maarten; Stumpel, Constance; van Amelsvoort, Therese. Client-centred clinical genetic diagnostics. ADVANCES IN MENTAL HEALTH AND INTELLECTUAL DISABILITIES (2018)

[View All](#)

All Boolean operators are accepted as well as the wildcard characters. Quotation marks have to be used to search for a string (exact phrase). Implicit AND operator is present between words. A topic search for X “whole exome sequencing” can also be refined by a topic search for Y “mutation”:



It would be equivalent to search for X AND Y or “whole exome sequencing” AND mutation.

Web of Science™ Core Collection automatically applies **lemmatization** rules to Topic search queries. Lemmatization reduces inflected forms of a word to their lexical root. With lemmatization turned on, a search term is reduced to its "lemma" and inflected forms of the word are retrieved. As a result, lemmatization can reduce or eliminate the need to use wildcards to retrieve plurals and variant spellings of a word.

Lemmatization applies only to English-language search terms. Web of Science™ Core Collection does not retrieve synonyms and lemmatized terms when search terms are enclosed in quotation (" ") marks.

Web of Science™ Core Collection automatically finds spelling variations (such as U.S. and U.K. spelling differences) in Topic search terms. To turn off this feature, quotation marks should be used. See here a list of synonyms:

[http://images.webofknowledge.com/WOKRS520B4.1/help/WOS/hs\\_spelling\\_terms.html](http://images.webofknowledge.com/WOKRS520B4.1/help/WOS/hs_spelling_terms.html)

## 2. TITLE

The title search retrieves words or phrases included in the document titles. Same rules and characteristics of the topic search apply. If a title contains a formula (i.e. the electron pairing of  $K_xFe_2-ySe_2$ ) alphanumeric characters cannot be separated by spaces.

### 3. AUTHOR

First of all, author names need to be written in the correct way to be captured by the author disambiguation algorithm (DAIS):

If there is no comma (,) then the first character is the first initial and the last word is the surname. If there is a comma, then everything before the comma is the surname and the first non-space character after the comma is the first initial.

e.g. If the “Author Name” field contains “Andres de Blas”, then Distinct Author algorithm will capture this as

Last name = Blas

First Initial = A

If the “Author Name” field contains “de Blas, Andres”, then DAIS will capture this as

Last name: de Blas

First initial: A

The correct way to make author name perfectly captured, is writing it in the following format:

**Lastname, First name / First initial**

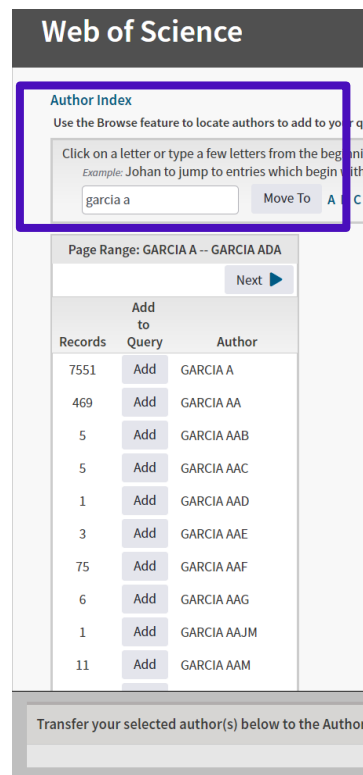
Keeping this in consideration, here some guidelines for searching author’s papers:

- The author’s last name should be followed by a space and the author’s initials.
- The system automatically adds the asterisk (\*) wildcard when a user enters only one initial. So, entering Carloni M is the same as entering Carloni M\*.
- Upper, lower, or mixed case would bring to the same results. For example, searching for Lee (or lee) is the same as searching for LEE.
- Beginning with 1998 data, non-alphanumeric characters (for example, the apostrophe in O'Brian) and spaces in surnames (for example, de la Rosa) are preserved in surnames. To effectively search across multiple years, enter surnames that take into account all possible variations of the name.
- In most name searches, Web of Science™ Core Collection returns the same number of records whether you enter a space, a hyphen ( - ), or an apostrophe ( ' ); but, in any cases, it’s better search for all name variants.
- Searching for surnames containing particles with and without a space after the particle (De Carloni or Decarloni) will allow to find variants of the name and to increase the number of returned results.
- Diacritical marks in an author's name are not searchable. For example, a search on the name Schröder returns an error message. The name Schröder may appear (and has to be searched) in the database as Schroder or Schroeder.
- Asian names appear in the database exactly as they do in the source document. The name Zhuang Jun may appear in the database as:

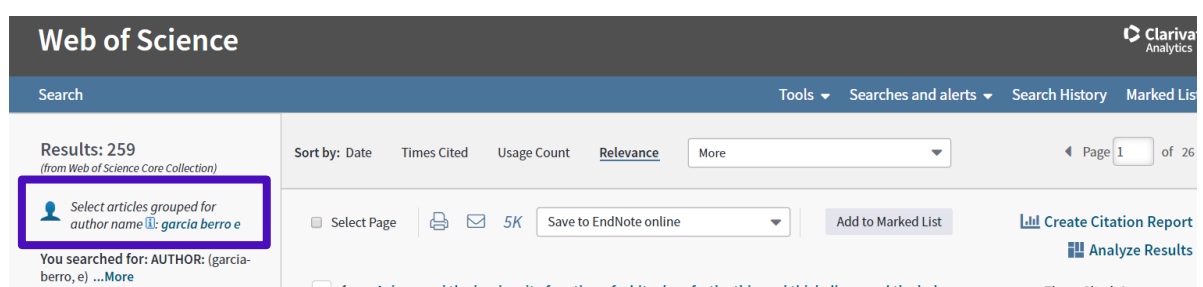


- Zhuang Jun
- Zhuang-Jun
- Fan Zhuang-jun

Author names can be selected from a list when performing an author search (see below):



When an author search is performed, distinct author sets (papers likely to be written by the same person) can be retrieved (see below)



You searched for: AU I HUK: garcia berro e" ...[More](#)

Article Groups Last Updated: August 17, 2018

Records grouped together are likely written by the same person. ([Tell me more.](#))  
If your papers appear in multiple article groups use the I wrote these publications button to add them to your publication list in ResearcherID and have them grouped together.

[View records](#) [Add to ResearcherID - I wrote these](#) [Clear all](#)

	Author Names	Last Known Organization <a href="#">i</a>	Research Areas	Publication Years
1. <input type="checkbox"/>	GARCIA BERRO E Also published as: GARCIA BERRO ENRIQUE GACIABERRO E BERRO EG	Polytechnic University of Catalonia	ASTRONOMY ASTROPHYSICS (203) PHYSICS (27) ENGINEERING (11) OPTICS (5) REMOTE SENSING (4)	1987 - 2017
<a href="#">View profile at ResearcherID.com</a> <a href="#">A Sampling of Publications by this Author:</a>				
2. <input type="checkbox"/>	GARCIA BERRO E Also published as: GARCIA BERRO ENRIQUE	Polytechnic University of Catalonia	ASTRONOMY ASTROPHYSICS (54) EDUCATION EDUCATIONAL RESEARCH (4) PHYSICS (4) IMAGING SCIENCE PHOTOGRAPHIC TECHNOLOGY (2) INSTRUMENTS INSTRUMENTATION (2)	2003 - 2018
Records: 63 <a href="#">A Sampling of Publications by this Author:</a>				
3. <input type="checkbox"/>	BERRO EG Also published as: GARCIA BERRO ENRIQUE	Institut d'Estudis Espacials de Catalunya (IEEC)	ASTRONOMY ASTROPHYSICS (1) ENGINEERING (1) OPTICS (1) REMOTE SENSING (1)	1989 - 2015

## 5. AUTHOR IDENTIFIERS

The Web of Science™ Core Collection supports multiple author identifiers including ResearcherID (a unique Web of Science Author ID scheme started several years ago), as well as ORCID (Open Researcher and Contributor ID), the international standard ([www.orcid.org](http://www.orcid.org)) officially launched on 16<sup>th</sup> October 2012.

It's a field of metadata in the database, searchable through the interface or via APIs.

**Web of Science**

Search Tools ▾

Select a database Web of Science Core Collection ▾ [Learn More](#)

Basic Search Cited Reference Search Advanced Search + More

✕ Author Identifiers ▾

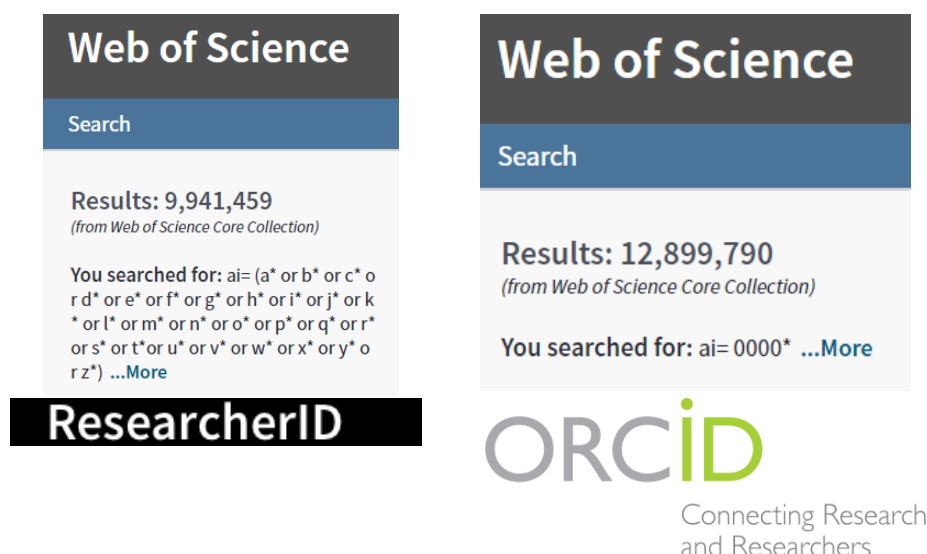
Through Author Identifiers authors can claim for own articles and associate them with their profiles. Once a paper is linked to an author identifier profile, the system can retrieve it through the ID and without occurring in the disambiguation problems.

Currently<sup>33</sup> there are about **650,000 RID profiles** and about **200,000 ORCID profiles**<sup>34</sup> with at least a publication in the Web of Science™ Core Collection.

<sup>33</sup> January 2018

<sup>34</sup> These are ORCID profiles associated with RID profiles. On ORCID website there are 5,385,042 profiles (including profiles with no papers) as of September 2018.

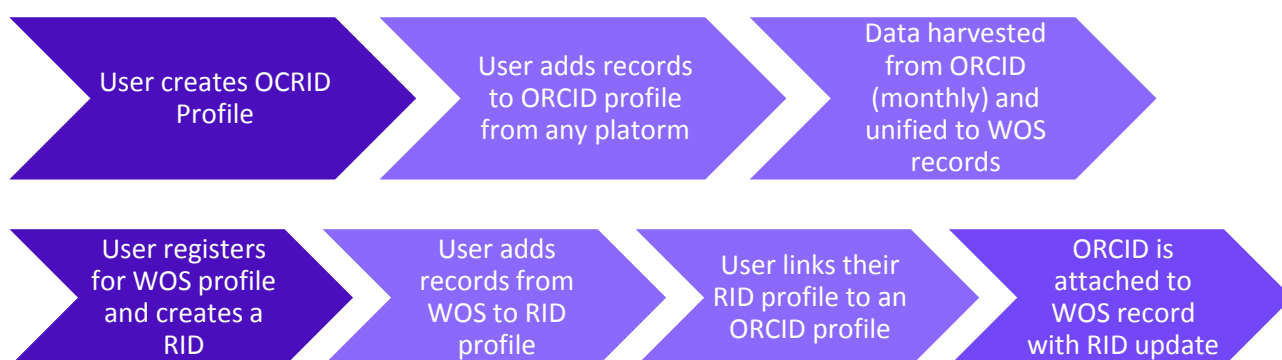
In terms of papers, there almost 10 million papers associated to a RID profile and more than 12 million associated to an ORCID profile (see below)<sup>35</sup>



RID profiles are updated in Web of Science™ Core Collection biweekly whilst for what concerns ORCID profiles a regular monthly feed of data is received from ORCID and applied to Web of Science™ Core Collection records.

RID Profiles and ORCID profiles can also be synched directly from the RESEARCHER ID application and in that case the ORCID number is attached to the Web of Science™ Core Collection record with the fortnightly RID update

So basically ORCID profiles can be updated in Web of Science™ Core Collection records via two different workflows (see below):



## 6. GROUP AUTHOR

A group author is an organization or institution that is credited with authorship of a source publication such as an article, a book, a proceeding, or another type of work.

<sup>35</sup> August 2018

Group Author can be selected from the index

**Web of Science**

Search

Select a database: Web of Science Core Collection

Basic Search | Cited Reference Search | Advanced Search | + More

CERN NA63 COLLABORATION

Group Author

Search

Select from index

**Web of Science**

Group Author Index

Use the Browse and Find features to locate group authors to add to your query.

Click on a letter or type a few letters from the beginning of the name to browse alphabetically. Example: Johan to jump to entries which begin with JOHAN

Enter text to find group authors containing the text.

CERN

Results Page 1 ( Group Authors 1 - 48 of 48 )

Records	Add to Query	Group Author
1	Add	ALICE TOF GRP BOLOGNA CERN ITEP
1	Add	ALICE TOF GRP BOLOGNA-CERN-ITEP
8	Add	ATLAS COLLABORATION CERN
1	Add	CAGLIARI CERN DUBNA EDINBURGH FERRARA FIRENZE
327	Add	CERN
1	Add	CERN ACCELERATOR TECHNOLOGY SECT
1	Add	CERN ACE COLLABORATION
1	Add	CERN BENEFIT ATLAS LIQUID
1	Add	CERN CMS HCAL COLLABORATION

Transfer your selected author(s) below to the Group Author field on the search

**Web of Science**

Search | Search Results

Experimental investigation of the Landau-Pomeranchuk-Migdal effect in low-Z targets

By: Andersen, KK (Andersen, K, K.)<sup>[1]</sup>; Andersen, SL (Andersen, S, L.)<sup>[1]</sup>; Esberg, J (Esberg, J.)<sup>[2]</sup>; Knudsen, H (Knudsen, H.)<sup>[1]</sup>; Mikkelsen, RE (Mikkelsen, R, E.)<sup>[1]</sup>; Uggerhoj, UI (Uggerhoj, U, I.)<sup>[1]</sup>; Wistisen, TN (Wistisen, T, N.)<sup>[1]</sup>; Sona, P (Sona, P.)<sup>[3]</sup>; Mangiarotti, A (Mangiarotti, A.)<sup>[4]</sup>; Ketel, D (Ketel, D.)<sup>[2]</sup>

Group Author(s): CERN NA63 Collaboration

PHYSICAL REVIEW D

Volume: 88 Issue: 7

Article Number: 072007

DOI: 10.1103/PhysRevD.88.072007

Published: OCT 15 2013

Document Type: Article

View Journal Impact

Citation Network

In Web of Science Core Collection

0 Times Cited

Create Citation Alert

21 Cited References

View Related Records

And can be searched from the Web of Science™ Core Collection record.

## 7. EDITOR

Editors can be searched exactly as author names and are reported on the record

Select a database: Web of Science Core Collection [Learn More](#)

Basic Search Cited Reference Search Advanced Search + More

Search input: anderssen, rs Editor Search Search tips

+ Add row | Reset

**Development of a Community Hydrologic Information System**

By: Tarboton, DG (Tarboton, D. G.)<sup>[1]</sup>; Horsburgh, JS (Horsburgh, J. S.)<sup>[1]</sup>; Maidment, DR (Maidment, D. R.); Whiteaker, T (Whiteaker, T.); Zaslavsky, I (Zaslavsky, I.); Piasecki, M (Piasecki, M.); Goodall, J (Goodall, J.); Valentine, D (Valentine, D.); Whitenack, T (Whitenack, T.)  
[View ResearcherID and ORCID](#)

18TH WORLD IMACS CONGRESS AND MODSIM09 INTERNATIONAL CONGRESS ON MODELLING AND SIMULATION: INTERFACING MODELLING AND SIMULATION WITH MATHEMATICAL AND COMPUTATIONAL SCIENCES

Edited by: **Anderssen, RS**, Braddock, RD, Newham, LTH

Pages: 988-994  
 Published: 2009  
 Document Type: Proceedings Paper

**Citation Network**  
 In Web of Science Core Collection  
**22**  
 Times Cited  
[Create Citation Alert](#)

All Times Cited Counts

## 8. PUBLICATION NAME

Publication names can be searched through this record in the basic search. If the auto-suggestion is turned on (in the “more settings”) the system helps users suggesting up to 10 names after first three letters (see below):

**Web of Science**

Search Tools Searches and

Select a database: Web of Science Core Collection [Learn More](#)

Basic Search Cited Reference Search Advanced Search + More

Search input: british Publication Name Search

+ Add row | Reset

british dental journal  
 british journal of anaesthesia  
 british journal of cancer  
 british journal of dermatology  
 british journal of haematology  
 british journal of pharmacology  
 british journal of psychiatry  
 british journal of radiology  
 british journal of surgery  
 british medical journal

Auto-suggest publication names  
 On

Default Number of Search Fields to Display

Wildcard characters, quotation marks or Boolean operators can be used whilst using the ampersand (&) is not mandatory: Web of Science™ Core Collection returns the same number of records whether user enters the ampersand or not.

**Web of Science**

**Publication Name Index**  
Use the Browse and Find features to locate Publication Name to add to your query.

Click on a letter or type a few letters from the beginning of the title to browse alphabetically by title.  
*Example: plant to jump to entries which begin with PLANT*

Move To **A B C D E F G H I J K L M N O P Q R S T U V W X Y Z 0 1 2 3 4**

Enter text to find titles containing the text.  
 **Find**

Results Page 1 (Titles 1 - 50 of 159)  
[1|2|3|4]

Records	Add to Query	Source Title
24	<b>Add</b>	ACUTE BLOOD PURIFICATION
56	<b>Add</b>	ADVANCES IN BLOOD DISORDERS
25	<b>Add</b>	ALTERNATIVE APPROACHES TO HUMAN BLOOD RESOURCES IN CLINICAL PRACTICE
113	<b>Add</b>	AMERICAN JOURNAL OF BLOOD RESEARCH
324	<b>Add</b>	ANIMAL BLOOD GROUPS AND BIOCHEMICAL GENETICS
33	<b>Add</b>	ARCHIVES OF DISEASES OF THE HEART AND BLOOD VESSELS VOL. 82 SPECIAL ISSUE NO. 4
433	<b>Add</b>	ARTIFICIAL CELLS BLOOD SUBSTITUTES AND BIOTECHNOLOGY
567	<b>Add</b>	ARTIFICIAL CELLS BLOOD SUBSTITUTES AND IMMOBILIZATION BIOTECHNOLOGY

Transfer your selected title(s) below to the Publication Name field on the search page. **OK** **Cancel**

Web of Science™ Core Collection provides an online publication name list (see below)

But users can also search for publication names out of WoS in:

The Master Journal List: <http://mjl.clarivate.com/>

or in the index lists:

SCIE - [http://mjl.clarivate.com/publist\\_sciex.pdf](http://mjl.clarivate.com/publist_sciex.pdf)

SSCI - [http://mjl.clarivate.com/publist\\_ssci.pdf](http://mjl.clarivate.com/publist_ssci.pdf)

AHCI - [http://mjl.clarivate.com/publist\\_ah.pdf](http://mjl.clarivate.com/publist_ah.pdf)

## 9. DIGITAL OBJECT IDENTIFIER (DOI)

Web of Science™ Core Collection started to display **DOI (Digital Object Identifier)**<sup>36</sup>, the system for permanently identifying and exchanging intellectual property in the digital environment, in 2005.

In 2018, over 41 million records have a digital identifier:

The top screenshot shows the Web of Science search results page. The search results are sorted by Date, and the first result is highlighted. The DOI for the first result is 10.1038/227680a0.

The bottom screenshot shows the detailed view of the article 'CLEAVAGE OF STRUCTURAL PROTEINS DURING ASSEMBLY OF HEAD OF BACTERIOPHAGE-T4'. The DOI is 10.1038/227680a0.

## 10. YEAR PUBLISHED

Wildcards cannot be used to indicate a year range. For example, the search 2012-2016 will retrieve records for these five years, but 201\* will return an error message.

The screenshot shows the Web of Science search interface. The 'Year Published' filter is set to '1900-2018'. The search results are displayed below the filter.

<sup>36</sup> DOI® is a registered trademark of the International DOI Foundation. <https://www.doi.org/>

## 11. ADDRESS

To search for papers produced at a particular institution, user can use the address field, which searches the author affiliations indexed in article records.

Historically, authors have referred to the same institution or affiliation in different ways; so, any search claimed to be complete should include all variations (or variances).

Older records (before 1996) may not have addresses (or all addresses) associated with an author whilst in recent records a superscript number, indexed since 2008, may appear after an author's name in a Full Record. This means that an **association between the author's name and the author's address** has established. When user clicks the number link, the system takes user to the Addresses field where the author's address can be seen.

**Stereochemical and structural effects of (2R,6R)-hydroxynorketamine on the mitochondrial metabolome in PC-12 cells**

By: Faccio, AT (Faccio, Andrea T.)<sup>[1,2]</sup>; Ruperez, FJ (Ruperez, Francisco J.)<sup>[1]</sup>; Singh, NS (Singh, Nagendra S.)<sup>[3]</sup>; Angulo, S (Angulo, Santiago)<sup>[1]</sup>; Tavares, MFM (Tavares, Marina F. M.)<sup>[2]</sup>; Bernier, M (Bernier, Michel)<sup>[4]</sup>; Barbas, C (Barbas, Coral)<sup>[1]</sup>; Wainer, IW (Wainer, Irving W.)<sup>[3,5]</sup>  
[View ResearcherID and ORCID](#)

**Author Information**  
 Reprint Address: Wainer, IW (reprint author)  
 Mitchell Woods Pharmaceut, 4 Corp Dr, Suite 287, Shelton, CT 06484 USA.

**Addresses:**

- + [1] Univ San Pablo CEU, Fac Pharm, CEMBIO Ctr Metabol & Bioanal, Campus Monteprincipe, Madrid 28668, Spain
- + [2] Univ Sao Paulo, Inst Chem, BR-05513970 Sao Paulo, SP, Brazil
- + [3] NIA, Lab Clin Invest, NIH, Baltimore, MD 21224 USA
- + [4] NIA, Translat Gerontol Branch, NIH, Baltimore, MD 21224 USA
- [5] Mitchell Woods Pharmaceut, 4 Corp Dr, Suite 287, Shelton, CT 06484 USA

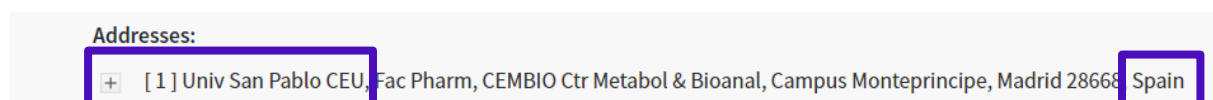
E-mail Addresses: [iwwainer@mitchellwoods.com](mailto:iwwainer@mitchellwoods.com)

Some suggestion for searching address field:

- When entering full names of organisations, do not use articles (a, an, the) and prepositions (of, in, for) in the name. For example, entering Univ Milan is a valid search but entering Univ of Milan results in an error message.
- Univ is mapped into University and vice versa (like Dept and Department, Med to Medicine and so on). Please, refer to [http://images.webofknowledge.com/WOKRS520B4.1/help/WOK/hp\\_address\\_abbreviations.htm](http://images.webofknowledge.com/WOKRS520B4.1/help/WOK/hp_address_abbreviations.htm) for all valid abbreviations.
- Only in address search, the operator SAME can be used. SAME works exactly like AND when used in other fields (such as Topic and Title fields) and when the terms appear in the same sentence



In the Analyze Results function, only two segments of the address are analysed and displayed. The first segment is the organisation name. This is the first listed segment followed by a coma, which separates sub segments of the address. The second segment included in analyse is the country. This is the last segment listed in the address.



## 12. ORGANIZATION ENHANCED

Institution names are not always published in a consistent manner within authors' addresses making it a challenge to accurately evaluate the data. Researchers often use different variants to designate their institution and the signature's policy from one journal to another might also differ. In addition institutions often change names or merge with others. Here is an example of some of the variations of a university's name:

**Organizations - Enhanced List**

\*\* Use this list to find the preferred name for an organization and the variants we have identified and associated with it. Note: Not all organizations have been included in this list. \*\*

Use the Browse and Find features to locate organizations to add to your query.

Click on a letter or number to browse organizations alphabetically by title  
 A B C D E F G H I J K L M N O P Q R S T U V W X Y Z 0 1 2 3 4 5 6 7 8 9

Enter text to find organizations containing or related to the text.

---

**DETAILS**

KEY:  = add to query

Organization Name:	<input type="button" value="Add"/> UNIVERSITY OF BASQUE COUNTRY
Other Names:	UNIVERSIDAD DEL PAIS VASCO; UNIV BASQUE COUNTRY; UNIV BILBAO; EUSKAL HERRIKO UNIBERTESI; UPV EHU; UNIVERSITY OF BASQUE COUNTRY
Address:	LEIOA, SPAIN
Website:	www.ehu.es/
Name Variants:	<input type="button" value="Add"/> ACHUCARRO BASQUE CTR NEUROSCI UPV EHU <input type="button" value="Add"/> AHOLAB UPV EHU <input type="button" value="Add"/> BASQUE COUNTRY MED SCH <input type="button" value="Add"/> BASQUE COUNTRY UNIV <input type="button" value="Add"/> BASQUE COUNTRY UNIV EHU <input type="button" value="Add"/> BASQUE COUNTRY UNIV EHU UPV <input type="button" value="Add"/> BASQUE COUNTRY UNIV UPV EHU

Transfer your selected organization(s) below to the Organizations - Enhanced field on the search page.

These variations make it difficult to quickly identify all papers written by authors affiliated with a given institution. The results of a search are in fact limited to the variants entered in the search string and the effect of this phenomenon in all the databases is a significant loss of visibility when analyzing data for research evaluation, collaboration analysis, activity reports, International rankings, etc.

In Web of Science™ Core Collection it has been created a field of metadata called "**Organization Enhanced**" for which, thanks to a set of unification rules, the different addresses and signature variants are tentatively mapped to the right institution name (see below an example of how a WoS record appears).

**Web of Science**

Search Search Results Tools Searches and alerts Search History Marked L

Look Up Full Text Save to EndNote online Add to Marked List 1 of 44

**QUINOLINE COMPOUNDS, 2,2'-DIPYRIDYL AND 1,10 PHENANTHROLINE WITH CHROMIC ACID**

By: TRUJILLO, PG (TRUJILLO, PG)

ANALES DE QUIMICA  
Volume: 68 Issue: 12 Pages: 1363-1372  
Published: 1972  
Document Type: Article  
[View Journal Impact](#)

**Author Information**  
Addresses:  
[1] UNIV BILBAO, FAC CIENC, DEPT QUIM, LAB QUIM INORG, BILBAO, SPAIN  
Organization-Enhanced Name(s)  
University of Basque Country

**Publisher**  
REAL SOC ESPAN QUIMICA, FACULTAD DE FISICA QUIMICA CIUDAD UNIV, 3 MADRID, SPAIN

**Categories / Classification**  
Research Areas: Chemistry  
Web of Science Categories: Chemistry, Multidisciplinary  
[See more data fields](#)

**Citation Network**  
In Web of Science Core Collection  
**1**  
Times Cited  
[Create Citation Alert](#)

**All Times Cited Counts**  
**1** in All Databases  
[See more counts](#)

**15**  
Cited References  
[View Related Records](#)

**Most recently cited by:**  
SLIWA, W.

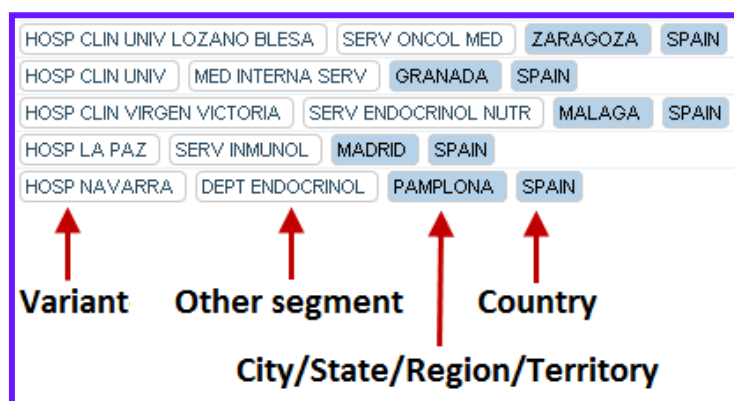
As of July 2018, More than **11,358 institutions' names** have been mapped and unified in the Web of Science™ Core Collection.

The main rules that are applied are:

- All publications of a geographical region (e.g. a country) are extracted from the Web of Science™ Core Collection and all author affiliations are analyzed.
- From each address are extracted character strings, or segments, containing key information. These segments will contain different name variants for the same institution.
- Starting with the most recurring variants, each of them is manually assigned to specific institutions.
- When a variant is vague or ambiguous (e.g. "Univ hosp"), or when an address could correspond to two institutions, other elements are taken in consideration for the unification rule, such as the location (e.g. city or postal code, country) or the sub-organization or the department, so that the combination of these specific address segments can be correctly assigned to an institution.
- When a variant corresponds to two parent institutions, the publication can be attached to both of these institutions.

It is important to point out that these rules are not automatically created, but manually established by internal experts and external collaborators and should be validated by the respective institutions using their internal knowledge.

Most papers will contain more than one author address; therefore a single paper will often be attached to two or more institutions. See below an example of performed analysis:

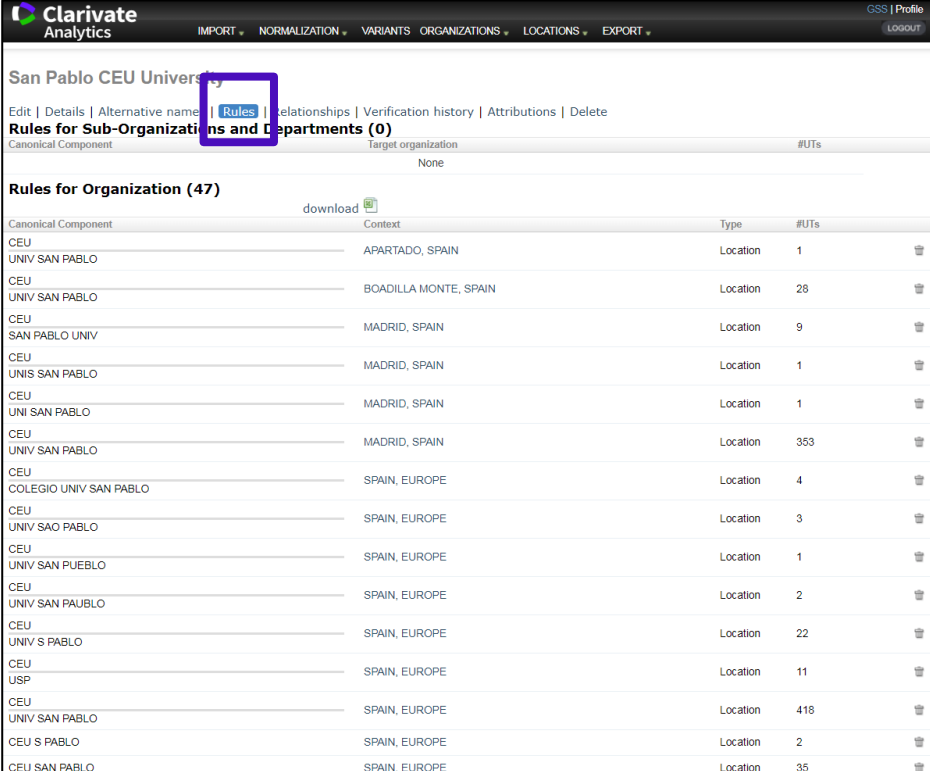


The screenshot shows the Clarivate Analytics interface for 'San Pablo CEU University'. The 'Details' tab is selected. The interface displays the following information:

- Alternative names:** San Pablo CEU Univ [InCites GC and WoS]
- Location:** Isaac Peral, 58 Madrid 28040, COMM MADRID, SPAIN
- Organization types:** Academic
- Products:** InCites GC and WOS
- Webpage:** http://www.uspceu.com/usp-home.html
- Description:** The San Pablo CEU University was founded 75 years ago to form personally and professionally to the future leaders of Spanish society. Ministers, heads of large national and international writers and thinkers, artists, academics and scientists have left our classrooms.
- Relationships:** San Pablo CEU University
- Trust rating:** A vertical bar indicates the trust level, with 'Verified' (blue) at the top, followed by 'Candidate', 'Basic Vetting', and 'Unverified' (green) at the bottom.

The system used for managing organization enhanced metadata is called **WAAN (Web Application for Address Normalization)**:

And the rules appear in the system, like below:



**San Pablo CEU University**

Edit | Details | Alternative name | **Rules** | Relationships | Verification history | Attributions | Delete

**Rules for Sub-Organizations and Departments (0)**

Canonical Component	Target organization	#UTs
	None	

**Rules for Organization (47)**

download

Canonical Component	Context	Type	#UTs
CEU	APARTADO, SPAIN	Location	1
UNIV SAN PABLO	BOADILLA MONTE, SPAIN	Location	28
CEU	MADRID, SPAIN	Location	9
SAN PABLO UNIV	MADRID, SPAIN	Location	1
CEU	MADRID, SPAIN	Location	1
UNIS SAN PABLO	MADRID, SPAIN	Location	353
CEU	SPAIN, EUROPE	Location	4
COLEGIO UNIV SAN PABLO	SPAIN, EUROPE	Location	3
CEU	SPAIN, EUROPE	Location	1
UNIV SAN PABLO	SPAIN, EUROPE	Location	2
CEU	SPAIN, EUROPE	Location	22
UNIV S PABLO	SPAIN, EUROPE	Location	11
CEU	SPAIN, EUROPE	Location	418
UNIV SAN PABLO	SPAIN, EUROPE	Location	2
CEU S PABLO	SPAIN, EUROPE	Location	35

The unification (inspecting Web of Science publication address components in order to attribute the publication to a specific organization) has been approached with dedicated projects<sup>37</sup>, but has to be an ongoing process and institutions and users need to actively collaborate. For more detailed info on unification process, refer to Appendix F.

### 13. CONFERENCE

The Conference field allows user to search the following fields within a record for conference proceedings papers (provided a subscription to CPCI is active).

- Conference Title
- Conference Location
- Conference Date
- Conference Sponsor

Some records in Web of Science™ Core Collection can be classified as both Article and Proceedings Paper.

<sup>37</sup> Ex: See GIPP – Global Institution Profiles Project

**Web of Science**

Search Tools Searches and alerts

Select a database Web of Science Core Collection Learn More

Basic Search Cited Reference Search Advanced Search + More

TEAGASC and Ireland Conference Search

**Water quality in Ireland - diffuse agricultural eutrophication - a key problem**

By: McGarrigle, M (McGarrigle, M)

Nutrient Management in Agricultural Watersheds: A Wetlands Solution  
 Edited by: Dunne, E.J.; Reddy, K.R.; Carton, O.T  
 Pages: 15-17  
 Published: 2005  
 Document Type: Proceedings Paper

Conference

Location: Wexford, **IRELAND**

Date: MAY, 2004

Sponsor(s): Teagasc Res Ctr; Univ Florida/IFAS, Soil & Water Sci Dept, Wetland Biogeochem Lab; Dept Agr & Food, **Ireland**; USDA; Dept Environm, Heritage & Local Govt, **Ireland**; Environm Protect Agcy, **Ireland**; Glanbia

**Citation Network**

In Web of Science Core Collection

**4**

Times Cited

Create Citation Alert

All Times Cited Counts

5 in All Databases

See more counts

## 14. LANGUAGE

Records in Web of Science™ Core Collection include a language indicator that categorizes documents by the language in which they are written.

To restrict a search, one or more languages can be selected from the list below. The default selection is “All languages”.

All languages, English, Afrikaans, Arabic, Basque, Bengali, Bulgarian, Byelorussian, Catalan, Chinese, Croatian, Czech, Danish, Dutch, Estonian, Finnish, Flemish, French, Gaelic, Galician, Georgian, German, Greek, Hebrew, Hungarian, Icelandic, Italian, Japanese, Korean, Latin, Latvian, Lithuanian, Macedonian, Malay, Multi-Language, Norwegian, Persian, Polish, Portuguese, Provençal, Rumanian, Russian, Serbian, Serbo-Croatian, Slovak, Slovenian, Spanish, Swedish, Thai, Turkish, Ukrainian, Unspecified, Welsh

Select a databaseWeb of Science Core CollectionLearn More

Basic SearchCited Reference SearchAdvanced Search+ More

> All languages |

Language

Search

+ Add row | Reset

Auto-suggest publication names

### Poly(lactide) [poly(lactic acid)]: Synthesis, properties and applications

By: Duda, A (Duda, A); Penczek, S (Penczek, S)

POLIMERY  
Volume: 48 Issue: 1 Pages: 16-27  
Published: 2003  
Document Type: Review  
View Journal Impact

#### Abstract

A review with 147 references (mainly from 1998 - 2002) covering studies on the biocompatible and (bio)degradable polymers, derivatives of lactic acid (PLA) is presented. Future perspectives of the PLA polymers technology, economical aspects of their production and applications, particularly as the commodity thermoplastic material, were briefly discussed. Then, preparation of lactic acid (LAc) and lactide (LA), used as substrates for PLA synthesis, was described. Methods of the controlled synthesis of PLA, via polycondensation of LAc and ring-opening polymerization of LA, were discussed more in detail. Mechanical and thermal properties, degradation pathways as well as the applications of PLA based materials were presented.

#### Keywords

Author Keywords: poly(lactide); poly(lactic acid); structure; substrates; synthesis; properties; applications  
KeyWords Plus: RING-OPENING POLYMERIZATION; DIRECT CONDENSATION POLYMERIZATION; L-LACTIDE POLYMERIZATION; EPSILON-CAPROLACTONE; CYCLIC ESTERS; ALUMINUM ISOPROPOXIDE; BULK-POLYMERIZATION; TIN(II) OCTOATE; BIODEGRADABLE POLYMERS; MOLECULAR-WEIGHT

#### Author Information

Reprint Address: Duda, A (reprint author)  
+ PAN, Ctr Badan Mol & Makromol, Ul Sienkiewicza 112, PL-90363 Lodz, Poland.  
Addresses:  
+ [1] PAN, Ctr Badan Mol & Makromol, PL-90363 Lodz, Poland  
**Publisher**  
INDUSTRIAL CHEMISTRY RESEARCH INST, 8 RYDYGIERA STR, 01-793 WARSAW, POLAND

#### Journal Information

Impact Factor: Journal Citation Reports

#### Categories / Classification

Research Areas: Polymer Science  
Web of Science Categories: Polymer Science

#### Document Information

Language: Polish  
Accession Number: WOS:000180235000002  
ISSN: 0032-2725

#### Other Information

IDS Number: 632QU  
Cited References in Web of Science Core Collection: 153  
Times Cited in Web of Science Core Collection: 62

See fewer data fields

#### Citation Network

In Web of Science Core Collection

**62**  
Times Cited  
Create Citation Alert

#### All Times Cited Counts

64 in All Databases  
See more counts

**153**  
Cited References  
View Related Records

#### Most recently cited by:

Deoray, Nikit; Kandasubramanian, Balasubramanian.  
Review on Three-Dimensionally Em  
Fiber-Embedded Lactic Acid Polyme  
Composites: Opportunities in Engin  
Sector.  
POLYMER-PLASTICS TECHNOLOGY &  
POLYMER LETTERS

## 15. DOCUMENT TYPE

Records in Web of Science™ Core Collection can be categorized by document types.

Document types are assigned at the section level (through an authority file) if this is possible (and each journal is evaluated individually for the characteristics of the items in each section) otherwise document types are assigned, based on the length of the paper, presence of an abstract, number of references, etc.

To restrict a search, one or more document types can be selected from the list below. The default selection is “All document types”.

All document types, Article, Abstract of Published Item, Art Exhibit Review, Bibliography, Biographical-Item, Book, Book Chapter, Book Review, Chronology, Correction, Correction/Addition, Dance Performance Review, Database Review, Discussion, Editorial Material, Excerpt, Fiction/Creative Prose, Film Review, Hardware Review, Item About an Individual, Letter, Meeting Abstract, Meeting Summary, Music Performance Review, Music Score, Music Score Review, News Item, Note, Poetry, Proceedings Paper, Record Review, Reprint, Review, Script, Software Review, TV Review/Radio Review, TV Review/Radio Review/Video, Theatre Review.

For more detailed info on document types, see chapter [Type of indexing](#)

## 16. FUNDING AGENCY

The name of a funding agency can be entered into the Funding Agency field to search within the Funding Acknowledgment table of a record. Currently<sup>38</sup>, 11, 627,098 documents in WOS CORE have a funding acknowledgment.

Funding information is indexed from the “funding acknowledgement” or “funding statement” paragraph within published item. More recently funding information is gathered from Research Fish<sup>39</sup> and Pubmed. Name of funding agencies in the Web of Science Core Collection are not currently<sup>40</sup> normalized (apart from in Incites B&A in which 1,032 are unified) and users have to search for all possible variants.

**Web of Science**

Search Tools ▾ Searches and alerts ▾

Select a database Web of Science Core Collection ▾ [Learn More](#)

[Basic Search](#) [Cited Reference Search](#) [Advanced Search](#) [+ More](#)

⊕ Funding Agency ▾ Search [Search tips](#)

+ [ 19 ] Univ Glasgow, Glasgow, Lanark, Scotland  
 + [ 20 ] Hosp La Paz Madrid, Spain  
 + [ 21 ] Univ Pavia, Policlin San Matteo, IRCCS, Dept Rheumatol, I-27100 Pavia, Italy  
 E-mail Addresses: [josef.smolen@wienkav.at](mailto:josef.smolen@wienkav.at)

**Funding**

Funding Agency	Grant Number
Abbott Immunology	
<b>Arthritis Research UK</b>	18475
National Institute for Health Research	NF-SI-0508-10299

[View funding text](#)

**Publisher**  
 B M J PUBLISHING GROUP, BRITISH MED ASSOC HOUSE, TAVISTOCK SQUARE, LONDON WC1H 9JR, ENGLAND

<sup>38</sup> August 2018

<sup>39</sup> <https://www.researchfish.net/>

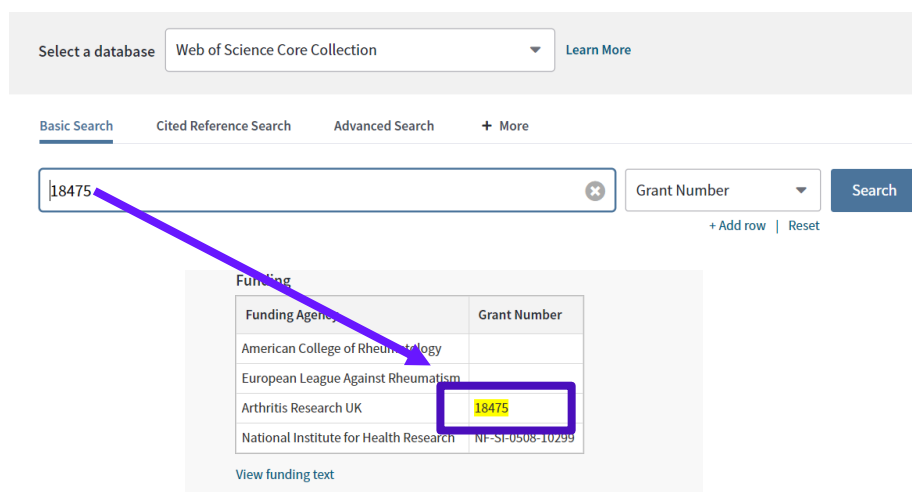
<sup>40</sup> A funding name unification project is on going



## 17. GRANT NUMBER

The number of a grant can be entered into the Grant field of a Funding Acknowledgment table on a record.

Wildcards or OR Boolean operators can be used. Grant information is publically available on many web-sites such as PubMed.



Select a database: Web of Science Core Collection [Learn More](#)

Basic Search Cited Reference Search Advanced Search + More

18475 [Grant Number](#) [Search](#) [+ Add row](#) [Reset](#)

Funding Agency	Grant Number
American College of Rheumatology	
European League Against Rheumatism	
Arthritis Research UK	18475
National Institute for Health Research	NI-SI-0508-10299

[View funding text](#)

## 18. ACCESSION NUMBER

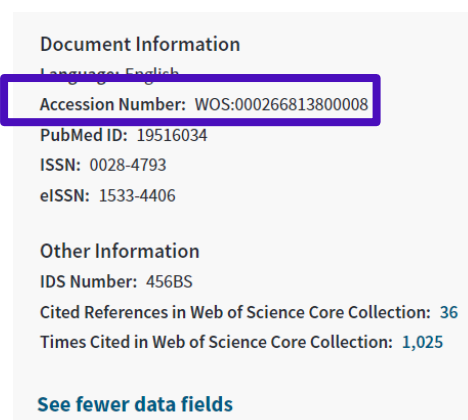
The accession number is a unique identifying number associated with each record in Web of Science™ Core Collection. It consists of an accession number (a product identification code) and a sequence number.

Multiple numbers can be searched through the OR Boolean operator. Wildcards can be used, whilst AND, NOT, NEAR, and SAME cannot when searching for accession numbers: Web of Science™ Core Collection will return an error message.

Accession number has been historically referred as UT number or also ISI LOC number.

The accession number can be found out in the document information area of a WoS record (see below).

The accession number ID is particularly relevant when using Web Services.



Document Information

Language: English

**Accession Number: WOS:000266813800008**

PubMed ID: 19516034

ISSN: 0028-4793

eISSN: 1533-4406

Other Information

IDS Number: 456BS

Cited References in Web of Science Core Collection: 36

Times Cited in Web of Science Core Collection: 1,025

[See fewer data fields](#)

## 19. PUBMED ID

On 2014, this new search field has been introduced. The PubMed<sup>41</sup> ID is a unique identifier assigned to each MEDLINE<sup>42</sup> record

**Web of Science**

Search Tools Searches and

Select a database Web of Science Core Collection Learn More

**Basic Search** Cited Reference Search Advanced Search + More

+ PubMed ID Search

+ Add row | Reset

**Document Information**  
Language: English  
Accession Number: WOS:000266813800008  
**PubMed ID: 19516034**  
ISSN: 0028-4793  
eISSN: 1533-4406

**Other Information**  
IDS Number: 456BS  
Cited References in Web of Science Core Collection: 36  
Times Cited in Web of Science Core Collection: 1,025

---

<sup>41</sup> **PubMed** is a free search engine accessing primarily the [MEDLINE database](#) and maintained by the [United States National Library of Medicine](#) (NLM) at the [National Institutes of Health](#)

<sup>42</sup> **MEDLINE** (Medical Literature Analysis and Retrieval System Online, or MEDLARS Online) is a [bibliographic database](#) of life sciences and biomedical information compiled by the [United States National Library of Medicine](#) (NLM),

## INTEGRATED ANALYTICAL SOLUTIONS

Web of Science™ Core Collection is interoperable with several other solutions and above all with Incites, the platform for bibliometrics analysis. Incites and its modules are built on a single dataset source from Web of Science™ Core Collection, aggregated with analytics and optimized.

## JOURNAL CITATION REPORTS (JCR) ON INCITES

ESI and JCR have been offered together in an InCites module named the “**Journal and Highly Cited Data**” (JHCD) and are fully integrated with Web of Science™ Core Collection<sup>43</sup>:

- The Journal Information Overlay from the Record Page, displays information from the most recent JCR update:

Genetic and serologic properties of **zika virus** associated with an epidemic, Yap State, Micronesia, 2007

By: Lanciotti, RS (Lanciotti, Robert S.)<sup>[1]</sup>; Kosoy, OL (Kosoy, Olga L.); Laven, JJ (Laven, Janeen J.); Velez, JO (Velez, Jason O.); Lambert, AJ (Lambert, Amy J.); Johnson, AJ (Johnson, Alison J.); Stanfield, SM (Stanfield, Stephanie M.); Duffy, MR (Duffy, Mark R.)  
[View ResearcherID and ORCID](#)

EMERGING INFECTIOUS DISEASES  
 Volume: 14 Issue: 8 Pages: 1232-1239  
 DOI: 10.3201/eid1408.080287  
 Published: AUG 2008

Document Type: Article  
[View Journal Impact](#)

EMERGING INFECTIOUS DISEASES

Impact Factor  
**7.422** **6.965**  
 2017 5 year

JCR® Category	Rank in Category	Quartile in Category
IMMUNOLOGY	17 of 155	Q1
INFECTIOUS DISEASES	4 of 88	Q1

Data from the 2017 edition of Journal Citation Reports

**Publisher**  
 CENTERS DISEASE CONTROL, 1600 CLIFTON RD, ATLANTA, GA 30333 USA

**ISSN:** 1080-6040  
**eISSN:** 1080-6059

**Research Domain**  
 Immunology  
 Infectious Diseases

[Close Window](#)

<sup>43</sup> Subscribers only

- The Journal Information Overlay is also available from the Results Set Page:

4. Genetic and serologic properties of **zika virus** associated with an epidemic, Yap State, Micronesia, 2007

By Landolt, Robert D.; Mosley, Olga; Hansen, Janeen J.; et al.

**EMERGING INFECTIOUS DISEASES** Volume: 14 Issue: 8 Pages: 1232-1239 Published: AUG 2008

Free Full Text from Publisher View Abstract

Times Cited: 751 (from Web of Science Core Collection)

Highly Cited Paper

Usage Count

NEW ENGLAND JOURNAL OF MEDICINE Volume: 314 Issue: 10 Pages: 951-958 Published: MAY 2006

**EMERGING INFECTIOUS DISEASES**

Impact Factor  
7.422 6.965  
2017 5 year

JCR® Category	Rank in Category	Quartile in Category
IMMUNOLOGY	17 of 155	Q1
INFECTIOUS DISEASES	4 of 88	Q1

Data from the 2017 edition of Journal Citation Reports

**Publisher**  
CENTERS DISEASE CONTROL, 1600 CLIFTON RD, ATLANTA, GA 30333 USA

**ISSN:** 1080-6040  
**eISSN:** 1080-6059

**Research Domain**  
Immunology  
Infectious Diseases

Close Window

- A JCR contextual<sup>44</sup> link is available at the bottom of the record page:

Author Information  
Reprint Address: Lanciotti, RS (reprint author)  
Ctr Dis Control & Prevent, Arbovirus Dis Branch, Diagnost & Reference Lab, 3150 Rampart Rd, CSU  
Addresses:  
[1] Ctr Dis Control & Prevent, Arbovirus Dis Branch, Diagnost & Reference Lab, Ft Collins, CO 80505  
E-mail Addresses: rsl2@cdc.gov

**Publisher**  
CENTERS DISEASE CONTROL, 1600 CLIFTON RD, ATLANTA, GA 30333 USA

**Journal Information**  
Table of Contents: Current Contents Connect  
Performance Indicators: Journal Citation Reports

**Impact Factor: Journal Citation Reports**

**Categories / Classification**  
Research Areas: Immunology; Infectious Diseases  
Web of Science Categories: Immunology; Infectious Diseases

**InCites Journal Citation Reports**

**EMERGING INFECTIOUS DISEASES**  
ISSN: 1080-6040  
CENTERS DISEASE CONTROL, 1600 CLIFTON RD, ATLANTA, USA 30333  
USA

Go to Journal Table of Contents Go to Ulrich's

**Key Indicators**

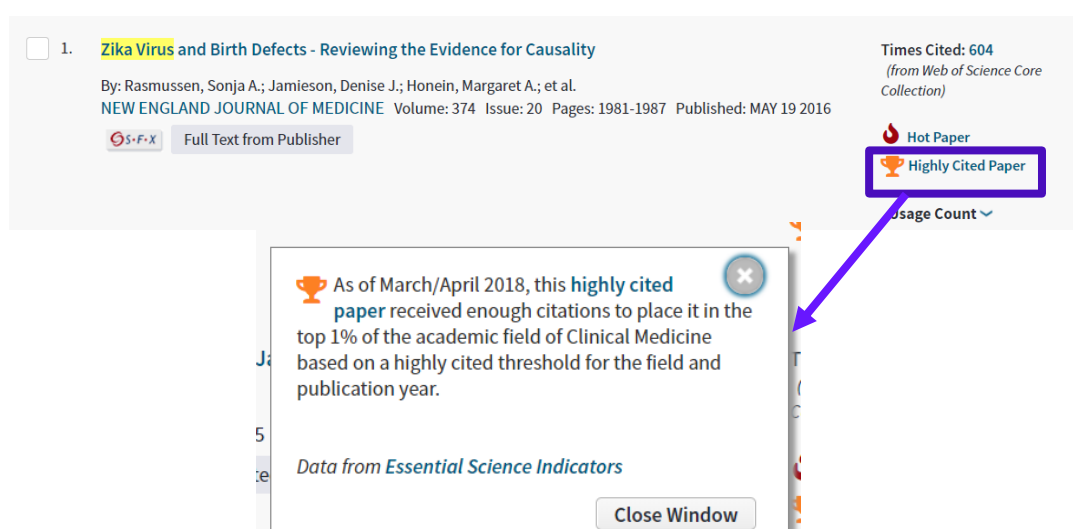
	Total Cites	Journal Impact Factor	Journal Self Cites	5 Year Impact Factor	Immediacy Index	Citable Items	Cited Half-Life	Citing Half-Life	Eigenfactor Score	Article Influence Score	% Articles in Citable Items	Normalized Eigenfactor	Average JIF Percentile
2017	29,657	7.422	7,101	6.965	2.031	393	7.0	5.3	0.05	2.562	99.49	6.75	92.689
2016	28,052	8.222	7,811	7.373	2.295	332	6.5	5.1	0.07	3.052	99.40	8.52	94.042
2015	26,266	6.994	6,611	6.691	1.732	355	6.6	5.6	0.06	2.469	99.72	7.09	92.426
2014	24,477	6.751	6,405	6.519	1.917	315	6.3	5.6	0.05	2.195	99.05	6.64	93.499
2013	24,364	7.327	7,028	6.855	1.695	311	5.9	5.6	0.06	2.234	99.04	7.04	93.924
2012	21,567	5.993	5,757	6.312	1.689	244	5.7	5.7	0.06	2.154	96.77	Not	91.476
2011	20,666	6.169	5,785	6.689	1.508	382	5.3	5.2	0.06	2.157	96.95	Not	90.131
2010	20,276	6.859	6,497	6.996	1.509	332	4.9	5.1	0.07	2.240	96.80	Not	92.808
2009	18,017	6.794	6,332	6.497	1.364	349	4.6	5.2	0.07	2.175	96.57	Not	92.534
2008	15,259	6.449	6,004	6.004	1.390	326	4.3	4.9	0.07	2.066	99.08	Not	91.971
2007	12,943	5.775	5,310	5.639	1.058	345	4.1	4.8	0.07	2.020	96.55	Not	89.408
2006	11,057	5.094	4,662	Not	1.222	338	3.8	5.0	Not	Not	97.93	Not	89.016
2005	8,882	5.308	4,790	Not	0.840	339	3.4	4.6	Not	Not	96.52	Not	90.061
2004	7,556	5.643	5,143	Not	1.350	374	3.1	4.8	Not	Not	99.20	Not	89.651
2003	5,374	5.340	4,783	Not	1.007	281	2.9	5.2	Not	Not	99.25	Not	85.372
2002	3,891	4.757	4,321	Not	0.978	277	3.3	5.4	Not	Not	99.28	Not	88.882

<sup>44</sup> i.e. bringing user to the JCR Journal profile page

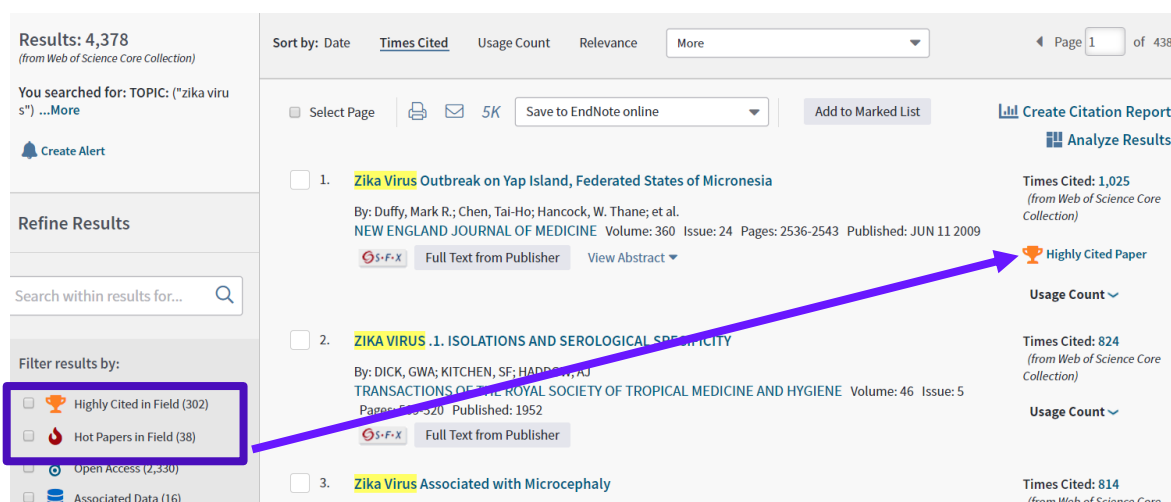
## ESSENTIAL SCIENCE INDICATORS (ESI) ON INCITES

ESI and JCR have been bundled in an Incites module, named the “**Journal and Highly Cited Data**” (**JHCD**) and are fully integrated with Web of Science™ Core Collection:

- ESI icons are available:



- ESI links (badges) are active, and on clicking, a window with related ESI information and a link to ESI itself appears.
- A results set can be filtered and refined by ESI TOP Papers: **Highly Cited Papers** (papers from SCI & SSCI from last 10 years in Top1% respect to peer papers) and **Hot Papers** (papers from SCI & SSCI from last 2 years that recently, in the latest bimonthly ESI update, are in the top 0.1% highly cited<sup>45</sup>)



<sup>45</sup> Namely are in the Top 0.1%

- An ESI link is also available at the bottom of the record page:

The image shows a document record page on the left and the InCites Essential Science Indicators (ESI) interface on the right. A purple box highlights the 'Performance Trends: Essential Science Indicators' link in the 'Journal Information' section of the record page. A purple arrow points from this link to the 'InCites Essential Science Indicators' interface, which displays 'Papers by Research Field' and 'Citation Trends' for a specific document.

**Keywords**  
KeyWords Plus: MICRONESIA; BRAIN; PCR

**Author Information**  
Reprint Address: Zupanc, TA (reprint author)  
+ Univ Ljubljana, Inst Microbiol & Immunol, Fac Med, Zaloska 4, Ljubljana 1000, Slovenia.

**Addresses:**  
+ [ 1 ] Univ Ljubljana, Inst Pathol, Fac Med, Ljubljana, Slovenia  
+ [ 2 ] Univ Ljubljana, Inst Microbiol & Immunol, Fac Med, Zaloska 4, Ljubljana 1000, Slovenia  
+ [ 3 ] Univ Med Ctr Ljubljana, Dept Perinatol, Div Gynecol & Obstet, Ljubljana, Slovenia  
+ [ 4 ] Univ Med Ctr Ljubljana, Inst Radiol, Ljubljana, Slovenia  
E-mail Addresses: tatjana.avsic@mf.uni-lj.si

**Publisher**  
MASSACHUSETTS MEDICAL SOC, WALTHAM WOODS CENTER, 860 WINTER ST., WALTHAM, MA 02451-1413 USA

**Journal Information**  
Performance Trends: [Essential Science Indicators](#)  
Impact Factor: Journal Citation Reports

**Categories / Classification**  
Research Areas: General & Internal Medicine  
Web of Science Categories: Medicine, General & Internal

**InCites Essential Science Indicators**  
Indicators | Field Baselines | Citation Thresholds

**Papers by Research Field**  
Citation Trends | Sort By: Citations | Customize Documents | 1 - 1 of 1

**Documents**  
Filter Results By

1 **ZIKA VIRUS ASSOCIATED WITH MICROCEPHALY** Times Cited: 688  
By: MLAKAR, J.; KORVA, M.; TUL, N.; et al  
Source: N ENGL J MED 374 (10): 951-958 MAR 10 2016  
Research Fields: CLINICAL MEDICINE

## INCITES BENCHMARKING & ANALYTICS (B&A)

The 'Save to InCites' functionality allows users to create custom datasets in Web of Science™ Core Collection and to analyze them in InCites, linking scientific discovery to the research performance evaluation process in three simple steps: Search, Export, Analyze (see below)

1. A user can create datasets up to 50,000 records between 1980 and current year in Web of Science™ Core Collection and save them to InCites.
2. Any records indexed in Web of Science™ Core Collection but not yet updated in InCites, are stored and made available in the next update of InCites.
3. The user receives an email when their datasets have been saved to InCites.
4. The dataset can be selected from the dataset menu in any module or from the 'My Folders' section. Currently, users can store up to 20 datasets at a time in InCites and can delete any unused datasets from 'My Folders'.

**Web of Science**

Search

Results: 305  
(from Web of Science Core Collection)

You searched for: TOPIC: ("zika virus") ...More

Create Alert

Refine Results

Search within results for...

Filter results by:

Highly Cited in Field (302)

Sort by: Date Times Cited Usage Count Relevance More

Select Page 5K

Save to EndNote online  
Save to EndNote desktop  
Save to ResearcherID - I wrote these  
Save to FECYT CVN  
Save to InCites  
Save to Other File Formats  
Save to RefWorks

Save to InCites

305  
search results will be sent to InCites

You can save 1 more Web of Science dataset to InCites

Dataset Name: ZIKA VIRUS TOP PAPERS

Save Cancel

InCites

Your requested dataset was successfully saved to InCites.

ZIKA VIRUS TOP PAPERS  
Click to open your dataset in InCites™

Dataset Details  
305 records

© 2017 Clarivate Analytics | Terms Of Use | Privacy Policy

Documents: 286

Tile Settings

Dataset: ZIKA VIRUS TOP PAPERS

Entity Type: Organizations

Time Period: Min: 1980 Max: 2018

Filters: Clear Filters

Filters Thresholds

Hide unapplied

By Attributes

- Organization Name
- Organization Type
- Location
- Rank
- Association

By Research Network

- Collaborations with People

Update Results

Bar Graph Web of Science Documents

Centers for Disease Control & Prevention - USA 37

Fundacao Oswaldo Cruz 32

Le Reseau International des Instituts Pasteur (RIIP) 17

University of Texas System 27

University of Texas Medical Branch Galveston 26

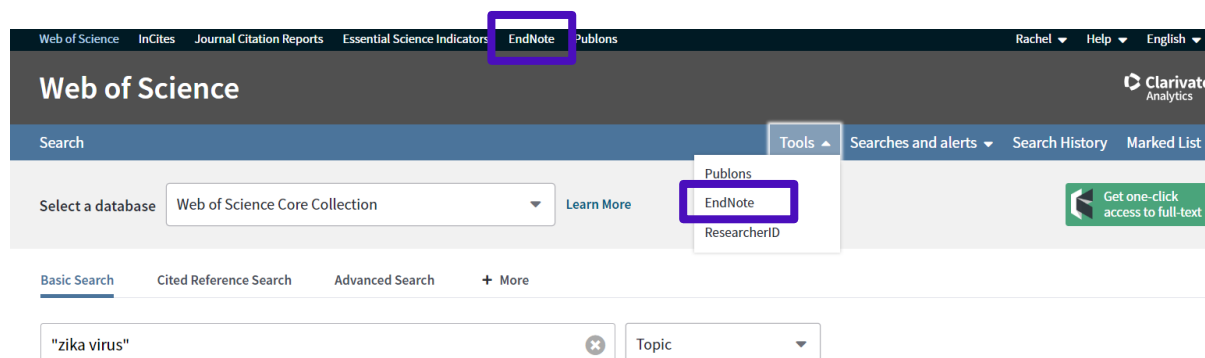
Search 417 results...

Benchmarks

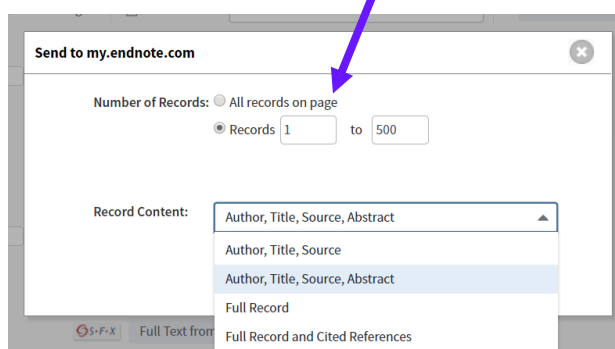
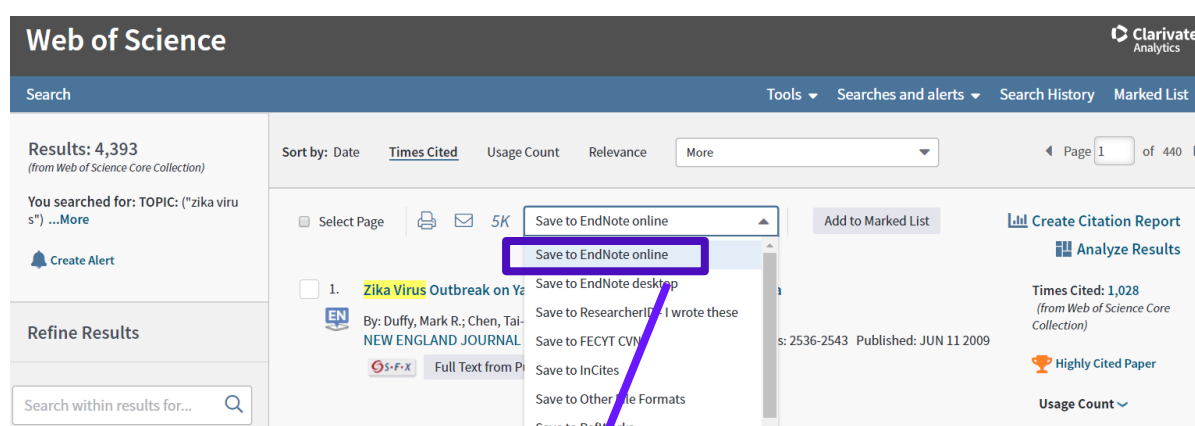
Name	Rank	Web of Science Documents	Category Normalized Citation Impact	Times Cited	% Docs Cited
Centers for Disease Control & Prevention - USA	1	37	30.96	4,888	100%

## ENDNOTE ONLINE

A link to Endnote Online is available on the product menu and the My Tools menu:



References can be added to Endnote online from the results page, a source record and the marked list. Up to 500 records can be exported at a time. Users can customise the levels of bibliographic information exported, from basic reference (author, title, and source) to full information (full records and cited references).

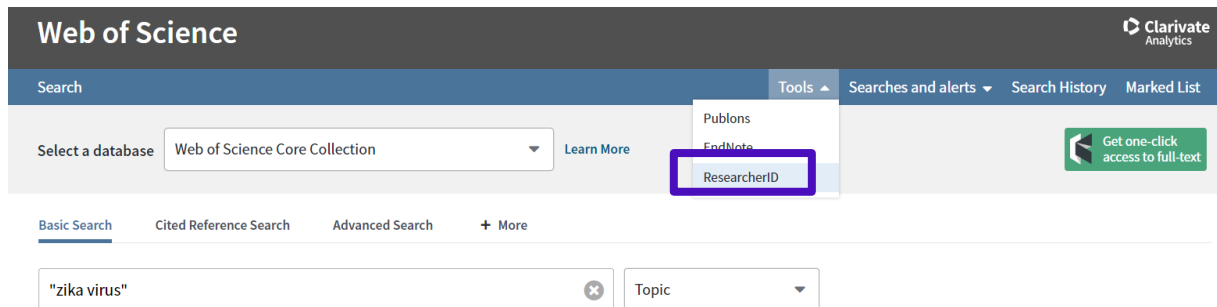


For more information on Endnote, see <http://endnote.com/product-details/basic>

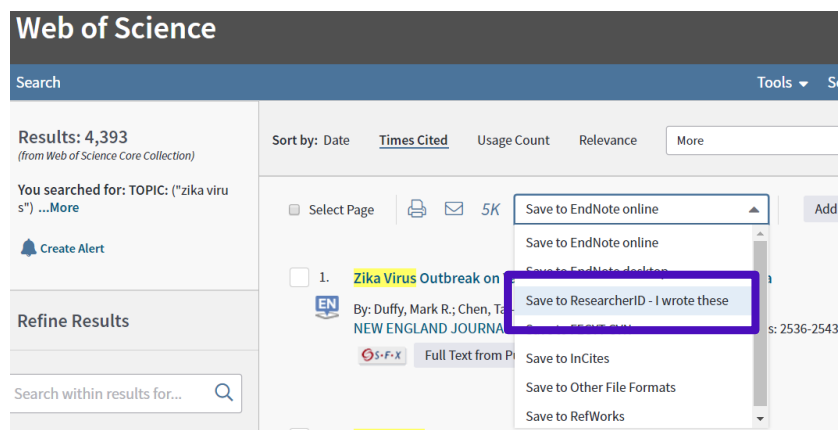


## RESEARCHER ID

A link to RESEARCHERID is available on the header:



Users can save records from the results page, record page and Marked List to their RESEARCHERID Profile or to an account for which they have administrator rights:



For more information on RESEARCHERID, see <https://clarivate.com/products/researcherid/>

## GOOGLE SCHOLAR COLLABORATION

A reciprocal links between Web of Science™ Core Collection and **Google Scholar** is available upon activation and allows users to look up a full text in Google Scholar from a Web of Science™ Core Collection record.

The screenshot displays the Web of Science interface. At the top, the 'Web of Science' logo and 'Clarivate Analytics' are visible. The search results for 'Zika Virus Outbreak on Yap Island, Federated States of Micronesia' are shown. A purple box highlights the 'Look Up Full Text' button. A purple arrow points from this button to the Google Scholar search results for the same article. In the Google Scholar results, a purple box highlights the 'Web of Science: 1016' citation count.

"Title", "author" and "year" are required and mandatory bibliographic metadata for an article lookup link.

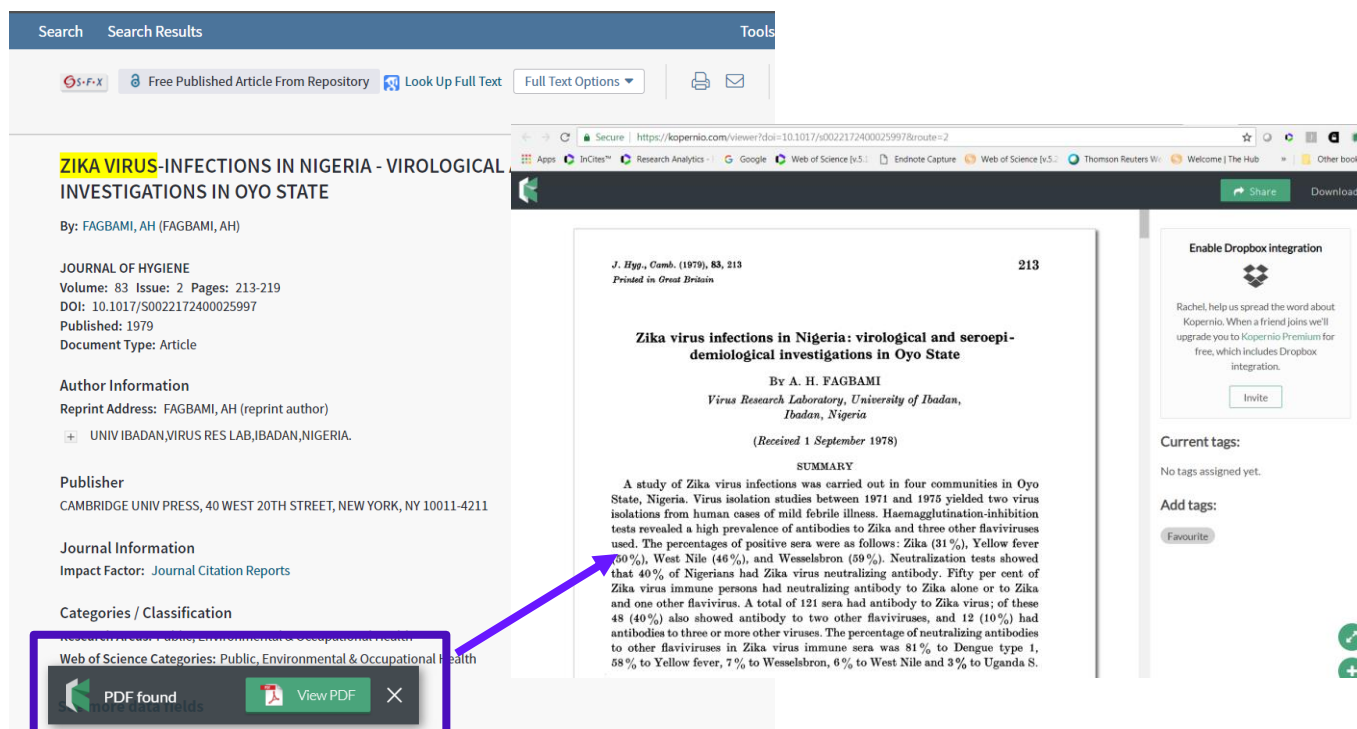
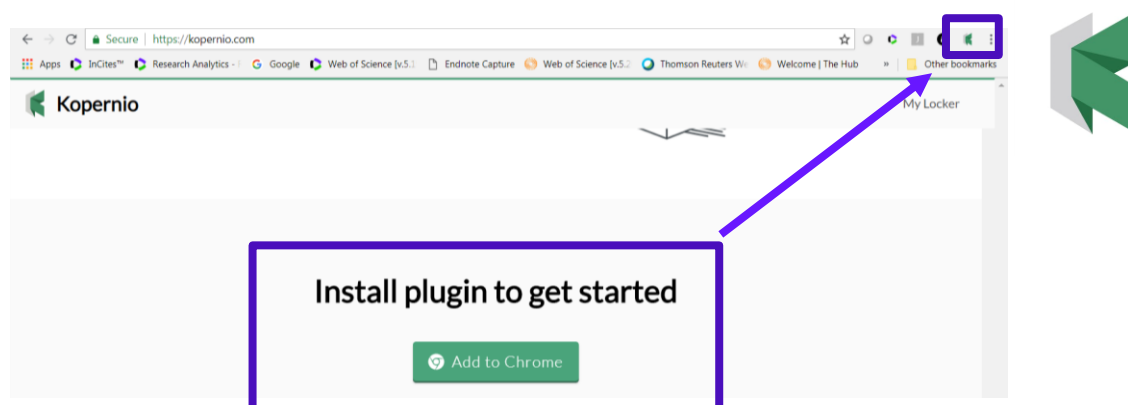
A Google Scholar user can jump into the Web of Science™ Core Collection from a Google page and view the number of citations coming from a selected subset of top journals.

**Google is currently not providing links to other databases.**

More info on <http://wokinfo.com/googlescholar/>

## KOPERNIO

- Kopernio, a Clarivate business, has developed a technology that provides a one click experience to obtain the full text. In order to use the technology, users need to install the Kopernio browser extension and create an account.
- The technology removes the inconvenience or barriers of VPN's, login forms, redirects and broken links.
- Kopernio integrates with Web of Science, Google Scholar, Pubmed and 20,000 other sites.
- Automatically search university library subscriptions, pre-print servers, institutional repositories and private blogs for free PDFs.
- Kopernio allows the user to access their university library at any time.
- Kopernio automatically files away the PDFs you read in your own private Kopernio Locker. This allows the user to return and read PDF's again later, anywhere, anytime.



## OPEN ACCESS AND IMPACT STORY

Clarivate Analytics, in partnership with Impactstory, has delivered a significant contribution to Open Science. Through new technology developed by Impactstory with Clarivate's support and implemented by Web of Science, researchers now can discover millions more **verified, legal versions of previously undiscoverable open access and free to read articles** among the searches they already perform every day across the full scope of *Web of Science*.

### **Open Access on *Web of Science* means:**

- Researchers get to more free, trusted full text faster
- Libraries can extend their full text budgets
- 100% peer-reviewed OA
- Filter any search to see OA
- Easily identify what publications are OA

### **OA Content Breakdown Highlights** for the last 20 years of data....

- 18% of Web of Science Core Collection data is available as OA
- 30% of records in Medline are OA
- Over 20% of BIOSIS Citation Index is OA

### **Use *Web of Science* search and analysis tools to:**

- See what institutions are producing the most OA research
- Discover what research areas are producing the most OA
- Create Citation report of specific content sets with Open Access
- And much more...

Open access status is provided across the Web of Science platform as a result of a partnership with Impactstory, a not-for-profit organization that recently launched a knowledgebase of Open Access (OA) content. This knowledgebase makes it possible to discover and link to legal Gold or Bronze (free content at a publisher's website) and Green (e.g., author self-archived in a repository) OA versions. This partnership improves discoverability and access to article-level OA versions not only by adding more links to OA content, but also by prioritizing the links to the best version of OA content when multiple versions of an article are available. Always consult the copyright owner for any re-use or licensing requests. You can learn more about OA on Web of Science at <http://info.clarivate.com/openaccess>.

The OA status of a document can be one of the following:

OA Type	Descriptions	
<b>Gold</b>	<b>DOAJ</b>	<p>Articles published in journals listed on the Directory of Open Access Journals (DOAJ). To be listed on the DOAJ, all articles in these journals must have a license in accordance with the Budapest Open Access Initiative. Please consult DOAJ for their specific definitions.</p> <p>Consult the copyright owner for any reuse or licensing requests.</p>
	<b>Other</b>	<p><i>Other Gold</i> open access articles are those identified as having a Creative Commons (CC) license by <a href="#">Impactstory's</a> Unpaywall Database but are not in journals listed on the DOAJ.</p> <p>Most of these articles are from hybrid journals. Hybrid open access journals are subscription journals that include some open access articles.</p> <p>Keep in mind, identification of Other Gold as an indicator of Hybrid Gold open access articles is at varying levels of completeness, especially for newly published items.</p> <p>Consult the copyright owner for any reuse or licensing requests.</p>
<b>Bronze</b>	<p>The licensing for these articles is either unclear or identified by Impactstory's Unpaywall Database as non-CC license articles. These are free-to-read or Public Access articles located on a publisher's site.</p> <p>A publisher may, as a promotion, grant free access to an article for a limited time. At the end of the promotional period, access to the article may require a fee which can lead to temporary errors in our data.</p> <p>Keep in mind, you may find content that is incomplete, especially new content.</p> <p>Consult the copyright owner for any reuse or licensing requests.</p>	
<b>Green</b>	<b>Published</b>	<p>Final published versions of articles hosted on an institutional or subject-based repository (e.g. an article out of its embargo period posted to PubMed Central).</p> <p>Consult the copyright owner for any reuse or licensing requests.</p>

	<b>Accepted</b>	Accepted manuscripts hosted on a repository. Content is peer reviewed and final, but may not have been through the publisher's copyediting or typesetting.  Consult the copyright owner for any reuse or licensing requests.
	<b>Submitted</b>	Submitted manuscripts that have not yet been through the peer review process that are hosted on a repository or preprint server (e.g., a preprint on the arXiv).  Consult the copyright owner for any reuse or licensing requests.

A key advantage of the partnership with Impactstory is the ability to prioritize the open access links so the user sees the version of record at the publisher's site first, followed by the final version at a repository, and then the accepted manuscript at the repository last. Only one open access link is provided.

Users may refine search results to identify these open access articles to ensure they can read the articles regardless of their library's holdings.

The following OA values are available as part of the export of the full record:

- DOAJ Gold:
- Other Gold:
- Bronze:
- Gold – for items from journals that are identified as fully Gold by the DOAJ and that are available at the publisher's website
- Gold or Bronze – for items that are Hybrid Gold or Bronze ("public access") and that are available at the publisher's website
- Green Published – for items that reflect the published version of an article that is available from a repository
- Green Accepted – for items that reflect the accepted version of an article that is available from a repository

## Refining Results for Open Access

Using the Open Access filter in the primary "Filter Results by" panel near the top left of the Search Results Summary page will limit search results to all items identified as Open Access of any type.

The Refine Results panel on the left also allows users to refine by the type of OA:

- "All Open Access" will limit search results to all items identified as Open Access of any type.
- "Gold or Bronze" will limit search results to all items identified as either Gold (of any type) or Bronze ('public access'). These publications will be identified with a link to access "Free Full Text from Publisher."
- "Green Published" will limit search results to all items identified with a link to access "Free Published Article from Repository."
- "Green Accepted" will limit search results to all items identified with a link to access "Free Accepted Article from Repository."

The screenshot shows the Web of Science search results page. The left sidebar contains the 'Refine Results' panel with the 'Open Access' filter selected. The main search results list shows several items, including 'PROTEIN MEASUREMENT WITH THE FOLIN PHENOL REAGENT' and 'CLEAVAGE OF STRUCTURAL PROTEINS DURING ASSEMBLY OF HEAD OF BACTERIOPHAGE T4'. The 'Open Access' filter is highlighted with a purple box. The 'Free Full Text from Publisher' link is highlighted with a purple box. The 'Associated Data' link is highlighted with a purple box. The 'Free Full Text from Publisher' link is highlighted with a purple box.

**Open Access**

- ☐ All Open Access (10,122,410)
- ☐ Bronze (5,339,776)
- ☐ Green Published (3,160,491)
- ☐ DOAJ Gold (2,925,866)
- ☐ Other Gold (806,045)
- ☐ Green Accepted (597,618)

Learn more about Open Access versioning in Web of Science

Refine

1. **PROTEIN MEASUREMENT WITH THE FOLIN PHENOL REAGENT**  
By: LOWRY, OH; ROSEBROUGH, NJ; FARR, AL; et al.  
JOURNAL OF BIOLOGICAL CHEMISTRY Volume: 193 Issue: 1 Pages: 265-275 Published: 1951  
Times Cited: 335,832 (from Web of Science Core Collection)  
Usage Count

2. **CLEAVAGE OF STRUCTURAL PROTEINS DURING ASSEMBLY OF HEAD OF BACTERIOPHAGE T4**  
By: LAEMMLI, UK  
NATURE Volume: 227 Issue: 5259 Pages: 680-+ Published: 1970  
Times Cited: 244,282 (from Web of Science Core Collection)  
Usage Count

3. **RAPID AND SENSITIVE METHOD FOR QUANTITATION OF MICROGRAM QUANTITIES OF PROTEIN UTILIZING PRINCIPLE OF PROTEIN-DYE BINDING**  
By: BRADFORD, MM  
ANALYTICAL BIOCHEMISTRY Volume: 72 Issue: 1-2 Pages: 248-254 Published: 1976  
Times Cited: 200,006 (from Web of Science Core Collection)  
Usage Count

4. **Generalized gradient approximation made simple**  
Times Cited: 72,275

3. **Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement**  
Associated Data  
By: Moher, David; Liberati, Alessandro; Tetzlaff, Jennifer; et al.  
Group Authors: PRISMA Group  
PLOS MEDICINE Volume: 6 Issue: 7 Article Number: e1000097 Published: JUL 2009  
Times Cited: 10,078 (from Web of Science Core Collection)  
Highly Cited Paper  
Usage Count

<https://journals.plos.org/plosmedicine/article/file?id=10.1371/journal.pmed.1000097&type=printable>

1.6 1 / 6

OPEN ACCESS Freely available online

Guidelines and Guidance

**Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement**

David Moher<sup>1,2,\*</sup>, Alessandro Liberati<sup>3,4</sup>, Jennifer Tetzlaff<sup>1</sup>, Douglas G. Altman<sup>5</sup>, The PRISMA Group<sup>\*</sup>

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**Introduction**

Systematic reviews and meta-analyses have become increasingly important in health care. Clinicians read them to keep up to date with their field [1,2], and they are often used as a starting point for developing clinical practice guidelines. Granting agencies may

clinicians, medical editors, and a consumer. The objective of the Ottawa meeting was to revise and expand the QUOROM checklist and flow diagram, as needed.

The executive committee completed the following tasks, prior to the meeting: a systematic review of studies examining the quality of reporting of systematic reviews, and a comprehensive literature

## Web of Science



Search Search Results Tools Searches and alerts Search History Marked List 10

Marked List 10 records | View Derwent Compounds Marked List: 0 compounds

Save Open/Manage Clear

10 total records on the Marked List  
Output author, title, source, abstract, and times cited for all records in the Marked List.

10 records from Web of Science Core Collection  
Output complete data from this product for these records.

Output Records [ - Hide Output Options ] | 5K

Step 1: Select records.  
☒ All records in this list (up to 500)  
☐ All records on page  
☐ Records  to

Step 2: Select content.  
 Select from the fields below:

Step 3: Select destination. [Learn about saving to bibliographic software]

☐ Select All

☒ Author(s) / Editor(s) ☒ Title  
☐ Abstract\* ☐ Cited References  
☐ Addresses ☒ Times Cited  
☒ ISSN / ISBN ☐ Cited References  
☐ IDS Number ☐ Language  
☐ Funding Information ☒ Accession Number  
☒ PubMed ID ☒ Open Access  
☐ Web of Science Categories  
☐ Author Identifiers  
☐ Hot Paper

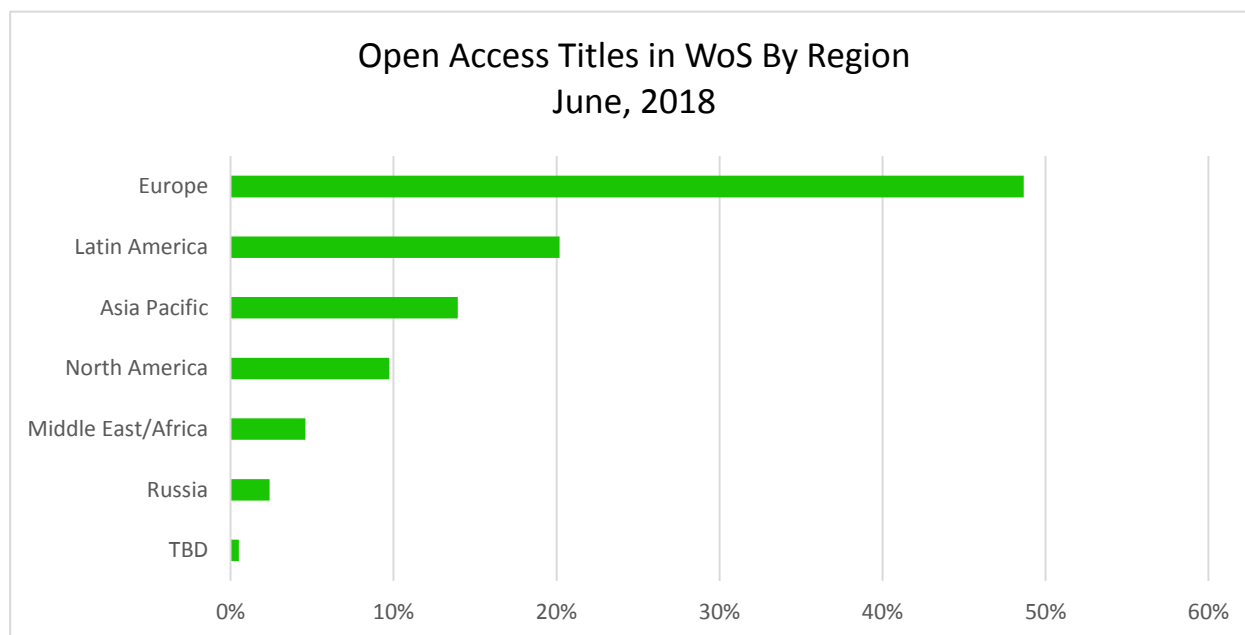
☐ Conference Information  
☐ Conference Sponsors  
☐ Publisher Information  
☐ Page Count / Chapter Count  
☐ Research Areas  
☐ Usage Count  
☐ Highly Cited

\*Selecting these items will increase the processing time.

Open access version is available in the record download

## OPEN ACCESS ANALYSIS IN WEB OF SCIENCE CORE

Currently<sup>46</sup> there are **3,832 OA journals**. OA journals now represent the **10.8% of full WoS-CC (excluding ESCI)** or **16.4% of full WoS-CC (including ESCI)**. Below is reported the regional provenience of OA journals indexed in WoS-CC (including ESCI):

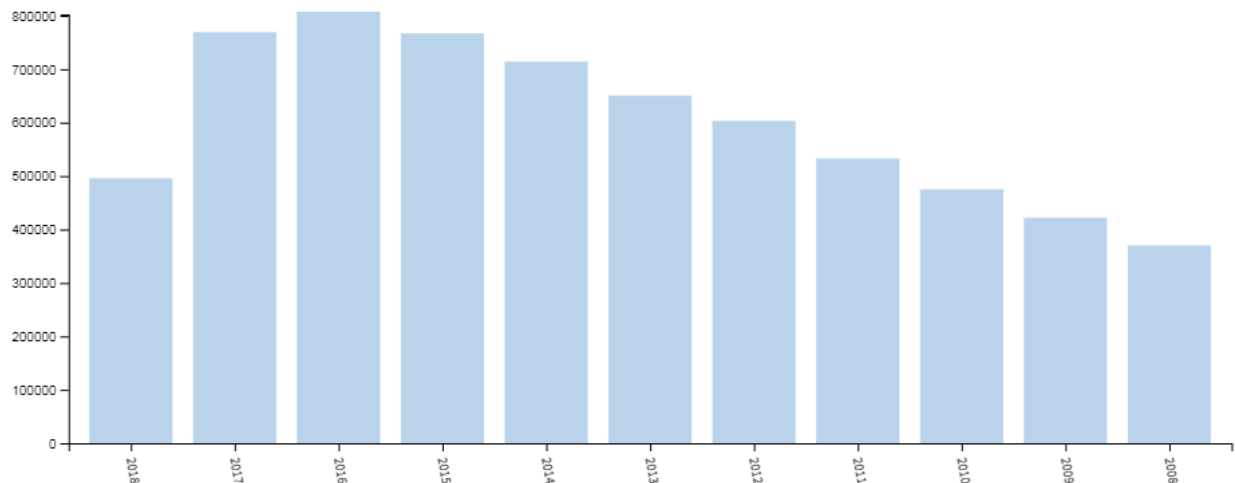


<sup>46</sup> September 2018



In terms of **All OA** records, see below the growth in the last ten years.

OA records represent the **23.3 %<sup>47</sup>** (6.5m out of 28m) of WoS-CC all editions 2008-2018.



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<sup>47</sup> September 2018

## DATA CITATION INDEX

The results page includes a filter which exposes records associated with data from the *Data Citation Index*. An associated record is a record in which the research data was used or somehow associated with the published record whose title appears at the top of the page.

You can only access the Associated Data page if a record in *Data Citation Index* is associated with the current record. You must have a subscription to the *Data Citation Index* to view associated records in the current product database.

For each record, the product displays:

- Title
- Authors / Group Authors
- Source information
- DOI URL hyperlink
- Document Type (Repository, Data Study, or Data Set)

The Title of a record takes you to the Full Record page in the *Data Citation Index* where you can review the metadata associated with the current record.

The DOI URL hyperlink takes you to an external source Web page where you can review the findings of the research study.

**Note:** You can also review the findings of a research study from the Full Record page by clicking on the **Link to External Source** hyperlink listed in the Associated Data table.

### About the Data Citation Index

*Data Citation Index* includes bibliographic metadata from research data in Data Studies and Data Sets from a wide range of international data repositories. Source records include three document types: Repository, Data Study, and Data Set.

Generally, the hierarchy of a repository is represented in the product database by linking Data Sets to a Data Study and the Data Study to a Repository.

Each record in the *Data Citation Index* contains standard bibliographic metadata such as author, abstract, keywords, descriptor terms, and more. Records may include cited references and citing article counts.

**Web of Science**

Search

Tools ▾ Searches and alerts ▾ Search History Marked List 75

Results: 16  
(from Web of Science Core Collection)

You searched for: TOPIC: ("zika virus") ...More

Create Alert

Refine Results

Search within results for...

Filter results by:

- Highly Cited in Field (10)
- Open Access (13)
- Associated Data (16)

Sort by: Date Times Cited Usage Count Relevance More

Select Page 5K Save to EndNote online Add to Marked List Create Citation Report Analyze Results

1. Genetic Characterization of **Zika Virus** Strains: Geographic Expansion of the Asian Lineage

By: Haddow, Andrew D.<sup>[1]</sup>; Schuh, AJ (Schuh, Amy J.)<sup>[1]</sup>; Yasuda, CY (Yasuda, Chadwick Y.)<sup>[2]</sup>; Kasper, MR (Kasper, Matthew R.)<sup>[2]</sup>; Heang, V (Heang, Vireak)<sup>[2]</sup>; Huy, R (Huy, Rekol)<sup>[3]</sup>; Guzman, H (Guzman, Hilda)<sup>[1]</sup>; Tesh, RB (Tesh, Robert B.)<sup>[1]</sup>; Weaver, SC (Weaver, Scott C.)<sup>[1]</sup>

PLOS NEGLECTED TROPICAL DISEASES Volume: 8 Issue: 1 Article Number: e2636 Published: JAN 2014

Associated Data

Articles with associated data mention a data set, data study, or data repository in the Data Citation Index that may be accessed for potential re-use.

Learn more

2. Molecular Evolution of **Zika Virus** in the Americas

By: Faye, Oumar; Freire, Caio C. M.; Iamarino, Atila; et al.

PLOS NEGLECTED TROPICAL DISEASES Volume: 8 Issue: 1 Article Number: e2636 Published: JAN 2014

Associated Data

Free Full Text from Publisher View Abstract

3. **Zika Virus** in Gabon (Central Africa)-2007: A New Threat from Aedes albopictus?

Times Cited: 298 (from Web of Science Core Collection)

Highly Cited Paper

Usage Count

Times Cited: 278 (from Web of Science Core Collection)

Highly Cited Paper

Usage Count

Times Cited: 250 (from Web of Science Core Collection)

Free Full Text from Publisher Look Up Full Text Full Text Options Save to EndNote online Add to Marked List 1 of 16

Genetic Characterization of **Zika Virus** Strains: Geographic Expansion of the Asian Lineage

Associated Data

By: Haddow, Andrew D.<sup>[1]</sup>; Schuh, AJ (Schuh, Amy J.)<sup>[1]</sup>; Yasuda, CY (Yasuda, Chadwick Y.)<sup>[2]</sup>; Kasper, MR (Kasper, Matthew R.)<sup>[2]</sup>; Heang, V (Heang, Vireak)<sup>[2]</sup>; Huy, R (Huy, Rekol)<sup>[3]</sup>; Guzman, H (Guzman, Hilda)<sup>[1]</sup>; Tesh, RB (Tesh, Robert B.)<sup>[1]</sup>; Weaver, SC (Weaver, Scott C.)<sup>[1]</sup>

View ResearcherID and ORCID

PLOS NEGLECTED TROPICAL DISEASES

Volume: 8 Issue: 1

Article Number: e1477

DOI: 10.1371/journal.pntd.0001477

Published: FEB 2012

Document Type: Article

View Journal Impact

Citation Network

In Web of Science Core Collection

298 Times Cited

Highly Cited Paper

Create Citation Alert

All Times Cited Counts

323 in All Databases

See more counts

Publisher

PUBLIC LIBRARY SCIENCE, 1160 BATTERY STREET, STE 100, SAN FRANCISCO, CA 94111 USA

Journal Information

Table of Contents: Current Contents Connect

Performance Trends: Essential Science Indicators

Impact Factor: Journal Citation Reports

Categories / Classification

Research Areas: Infectious Diseases; Parasitology; Tropical Medicine

Web of Science Categories: Infectious Diseases; Parasitology; Tropical Medicine

Associated Data: 3 (from Data Citation Index)

Probable distribution of Zika virus based on virus isolation and seroprevalence.	Data set	Link to External Source
Pairwise comparisons of African and Asian Zika virus strains.*	Data set	Link to External Source
Viruses used in this study.	Data set	Link to External Source

View All Associated Data

See more data fields

Probable distribution of **Zika Virus** based on virus isolation and seroprevalence.

From Repository: Figshare.

By: Heang, Vireak; Weaver, Scott C; Tesh, Robert B; Haddow, Andrew D; Schuh, Amy J; Yasuda, Chadwick Y; Huy, Rekol; Guzman, Hilda; Kasper, Matthew R

Figshare

DOI: <http://dx.doi.org/10.1371/journal.pntd.0001477.x001>

Viewed Date: 24 May 2013

Published: 2013

Document Type: Data set

Abstract

\*Earliest report, indicates either the first virus isolation or the first report of seroprevalence. Seroprevalence was either determined by one or more of the following methods: Haemagglutination inhibition, neutralization, complement-fixation, IgG and/or IgM ELISA. Of note, it is possible due to antigenic cross-reactivity among flaviviruses that seropositive individuals may have been previously exposed to one or more flaviviruses and not to Zika virus. Viral RNA sequenced from four patients (Lancioti et al. 2008).

Keywords

Author Keywords: Infectious diseases

Citation Network

In Web of Science Core Collection

1 Times Cited

Create Citation Alert

All Times Cited Counts

1 in All Databases

See more counts

0 Cited References

The Associated Data section includes links to DCI records. By clicking on a link, the user is directed to the corresponding DCI record where more information is obtained including the repository, authors and abstract.

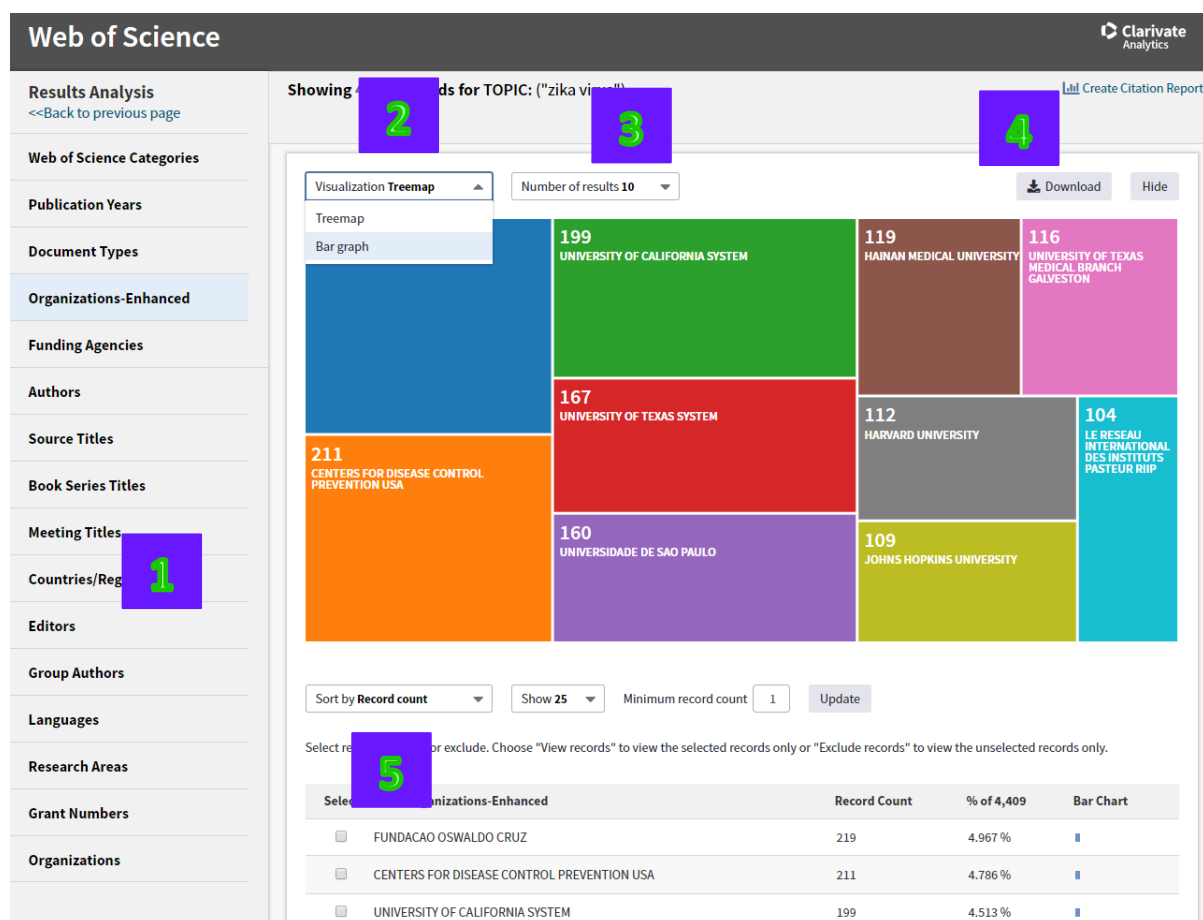
## FUNCTIONS & SERVICES

### ANALYZE RESULTS

This function, allows the user to group and rank records in a results set by extracting data values from a variety of fields. Analyze Results can be used to find the most prevalent authors in a particular field of study or generate a list of institutions ranked by record count based on the search query. The function is located in two different positions, as shown below.

The screenshot displays the Web of Science search results page. The top navigation bar includes 'Search', 'Tools', 'Searches and alerts', 'Search History', and 'Marked List'. The main results area shows a list of search results for the topic 'Zika virus'. The results are sorted by 'Times Cited' and include details such as the article title, author, journal, volume, issue, pages, and publication date. On the left side, there is a 'Refine Results' section with filters for 'Highly Cited in Field', 'Hot Papers in Field', 'Open Access', and 'Associated Data'. On the right side, there is a 'Create Citation Report' button and an 'Analyze Results' button. The 'Analyze Results' button is highlighted with a red box. Another 'Analyze Results' button is located in the bottom left corner of the results list, also highlighted with a red box.

As soon as the “Analyze Results” button the results are transferred to the Analyse Results Tool which permits an analysis of the records by various data points and visualizations.



1. The field options for the analysis are:

- Web of Science Categories
- Publication Years
- Document Types
- Organizations-Enhanced
- Funding Agencies
- Authors
- Source Titles
- Book Series Titles
- MeetingTitles
- Countries/Territories
- Document Types
- Editors
- Group Authors
- Languages
- Research Areas
- Grant Numbers
- Organizations

2. There are two visualisations available

- Treemap

- Bar graph
- 3. Both visualisations can present from a minimum of 5 to a maximum of 25 values.
- 4. The chosen visualisation can be downloaded as a .jpg file.
- 5. The user can select a field to analyze from the **Rank the Records** by one of the above fields. An option to display the top 10, 25, 50, 100, 250, or 500 results is available.
- 6. A minimum record count (threshold) is then set. To be listed in the results table, a value must appear at least this number of times in the set.
- 7. Ranked records can be sorted either by record count, which ranks the values from high to low, according to the number of records in which each value (minimum record count) appears; or by selected field, which sorts the list in ascending alphabetical (A-Z) or numeric (0-9) order.
- 8. The Analyze Results page shows (see below) the ranked records as selected above. These records can either be viewed in detail, or excluded. In addition to the record ranks, the record count, percentage of total, and a bar chart for each value is displayed.
- 9. The analysis data can be extracted as displayed or all data rows (up to 200,000 rows). The data downloads as tab-delimited text file which can be opened in Excel and formatted into columns using the import wizard.

Group Authors

Languages

Research Areas

Grant Numbers

Organizations

Sort by **Record count** Show 25 Minimum record count 1 Update

Select records to view, or exclude. Choose "View records" to view the selected records only or "Exclude records" to exclude the selected records only.

Select	Field: Organizations-Enhanced	Record Count	% of 4,432	Bar Chart
<input type="checkbox"/>	FUNDACAO OSWALDO CRUZ	222	5.009 %	
<input type="checkbox"/>	CENTERS FOR DISEASE CONTROL PREVENTION USA	212	4.783 %	
<input type="checkbox"/>	UNIVERSITY OF CALIFORNIA SYSTEM	202	4.558 %	
<input type="checkbox"/>	UNIVERSITY OF TEXAS SYSTEM	167	3.768 %	
<input type="checkbox"/>	UNIVERSIDADE DE SAO PAULO	162	3.655 %	
<input type="checkbox"/>	HAINAN MEDICAL UNIVERSITY	119	2.685 %	
<input type="checkbox"/>	UNIVERSITY OF TEXAS MEDICAL BRANCH GALVESTON	116	2.617 %	
<input type="checkbox"/>	HARVARD UNIVERSITY	114	2.572 %	
<input type="checkbox"/>	JOHNS HOPKINS UNIVERSITY	109	2.459 %	
<input type="checkbox"/>	LE RESEAU INTERNATIONAL DES INSTITUTS PASTEUR RIIP	105	2.369 %	
<input type="checkbox"/>	NATIONAL INSTITUTES OF HEALTH NIH USA	105	2.369 %	
<input type="checkbox"/>	CHINESE ACADEMY OF SCIENCES	97	2.189 %	
<input type="checkbox"/>	UNIVERSITY OF CALIFORNIA SAN FRANCISCO	69	1.557 %	
<input type="checkbox"/>	UNIVERSITY OF PISA	68	1.534 %	
<input type="checkbox"/>	INST LOUIS MALARDE	64	1.444 %	
<input type="checkbox"/>	CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE CNRS	63	1.421 %	
<input type="checkbox"/>	VA BOSTON HEALTHCARE SYSTEM	63	1.421 %	
<input type="checkbox"/>	YALE UNIVERSITY	62	1.399 %	

(3,974 Organizations-Enhanced value(s) outside display options.)  
(199 records(4.490%) do not contain data in the field being analyzed.)

Exclude Selected View Selected

Select a download option (tab-delimited text file)

☒ Data rows displayed in table  
☐ All data rows (up to 200,000)

Download

## SAVED SEARCHES AND ALERTS

The Search history can be reached either from the Search History tab or by going to the bottom of the Advanced Search screen.

The screenshot displays the Web of Science interface. At the top, the navigation bar includes links to Web of Science, InCites, Journal Citation Reports, Essential Science Indicators, EndNote, and Publons. The main header shows 'Web of Science' and 'Clarivate Analytics'. Below the header, the 'Search' tab is active, showing search results for 'TOPIC: ("zika virus")'. The results list three articles related to Zika virus, with the first article highlighted. The 'Search History' tab is also visible in the top navigation bar.

The 'Advanced Search' tab is selected, showing a search query input field and a 'Search' button. Below the input field, there are options to restrict results by languages and document types. The 'Search History' section at the bottom of the page shows a table of saved searches, with a purple arrow pointing to it from the 'Advanced Search' tab.

**Search History:**

Set	Results	Save History / Create Alert	Open Saved History	Edit Sets	Combine Sets	Delete Sets
# 3	19,247	FUNDING AGENCY: (junta de andalucia)	Indexes=SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, BKCI-S, BKCI-SSH, ESCI, CCR-EXPANDED, IC Timespan=All years	Edit	<input type="radio"/> AND <input type="radio"/> OR Combine	<input type="button" value="Select All"/> <input type="button" value="Delete"/>
# 2	3,002	TOPIC: ("hereditary angioedema")	Indexes=SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, BKCI-S, BKCI-SSH, ESCI, CCR-EXPANDED, IC Timespan=All years	Edit	<input type="radio"/> AND <input type="radio"/> OR Combine	<input type="button" value="Select All"/> <input type="button" value="Delete"/>

### Search History Table

The Search History table appears at the bottom of the Advanced Search and Search History pages. Whenever a search is performed, the results of the search display in the Search History table.

Search History:									
Set	Results	Save History / Create Alert    Open Saved History		Edit Sets	Combine Sets	Delete Sets			
					<input type="radio"/> AND <input type="radio"/> OR			Select All	
					Combine			Delete	
# 3	19,247	FUNDING AGENCY: (junta de andalucia) Indexes=SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, BKCI-S, BKCI-SSH, ESCI, CCR-EXPANDED, IC Timespan=All years		Edit	<input type="checkbox"/>				
# 2	3,002	TOPIC: ("hereditary angioedema") Indexes=SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, BKCI-S, BKCI-SSH, ESCI, CCR-EXPANDED, IC Timespan=All years		Edit	<input type="checkbox"/>				
# 1	4,448	TOPIC: ("zika virus") Indexes=SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, BKCI-S, BKCI-SSH, ESCI, CCR-EXPANDED, IC Timespan=All years		Edit	<input type="checkbox"/>				
					<input type="radio"/> AND <input type="radio"/> OR			Select All	
					Combine			Delete	

The Search History table shows the search set, a hyperlink to the results of each set, and the search logic used for each set. Search sets are listed in reverse chronological order with the most recent search set at the top of the table.

The Details Column displays field tags, search terms, timespan, and other information in the Search History table.

The phrase "Refined by" appears before each set created using the Search within Results, Refine Results, and Analyze Results options.

Search sets can also be combined using AND or OR Boolean operators. The sets are listed in the Search History table in reverse numerical order - the most recently created set is at the top of the table. It is also possible to delete sets.

### Save History / Create Alert

This feature allows the user to save search queries to a search history file that can be retrieved and opened at a later date. Up to 40 search sets may be saved to the host server or a local workstation.

Each search history record contains the search query and the selected settings for each query.



**Web of Science**

Search

Select a database: Web of Science Core Collection

Basic Search | Cited Reference Search

Use field tags, Boolean operators, parentheses, and bottom of the page. (Learn more about Advanced Search)

Example: TS=(nanotub\* AND carbon) NOT AU=S #1 NOT #2 more examples | view the

Search

Restrict results by languages and document types:

All languages: English, Afrikaans, Arabic

All document types: Article, Abstract of Published Item, Art Exhibit Review

Timespan: All years (1900 - 2018)

More settings

**Save search / create search alert**

Name: Rachel (required)

Description: Enter a description (optional)

☒ Email alerts

Email address: rachel.mangan@clarivate.com

Format: HTML

Alert type: Daily alert

Search query: FUNDING AGENCY: (junta de andalucia)

☐ The RSS feed will be available after creating the alert.

Cancel Save

**Save search history to a local drive**

Download your search history to a local drive. Close this window once the file has downloaded.

Download

Get one-click access to full-text

AND, OR, NOT, SAME, NEAR

SA= Street Address  
CI= City  
PS= Province/State  
CU= Country/Region  
ZP= Zip/Postal Code  
FO= Funding Agency  
FG= Grant Number  
FT= Funding Text  
SU= Research Area  
WC= Web of Science Category  
IS= ISSN/ISBN  
UT= Accession Number  
PMID= PubMed ID

The alert type choices are:

- Notify Only
- Author, Title, Source
- Author, Title, Source and Abstract
- Full Record

The Alert frequency options are:

- Daily
- Weekly
- Monthly

The Alert format options are:

- HTML
- Plain text
- Endnote
- Field Tagged

Saved searches remain active for an initial 168-day period. They may be renewed at any time during this period from the Search Searches and Alerts page (Fig. 14), which keeps the alert active for a further 168 days from the point of renewal.

### Open Saved History

Search History can be retrieved from the Open Saved History button, found both in the Search History page, and at the bottom of the Advanced Search screen.

From the resulting Saved Searches and Alerts overlay dialog (see below), saved searches may be opened and run. By default, saved searches and alerts originating from all database products are listed, but it is possible to filter per product.

The screenshot shows the Web of Science interface. The top navigation bar includes links for Web of Science, InCites, Journal Citation Reports, Essential Science Indicators, EndNote, and Publons. The user is Rachel, and the language is English. The main search area has a search bar with the example text "oil spill\* mediterranean" and a dropdown menu for "Select a database" set to "All Databases". Below the search bar are tabs for "Basic Search", "Cited Reference Search", and "Advanced Search". The "Basic Search" tab is active, showing a search bar with the example text "oil spill\* mediterranean" and a dropdown menu for "Select a database" set to "All Databases". Below the search bar are tabs for "Basic Search", "Cited Reference Search", and "Advanced Search". The "Basic Search" tab is active, showing a search bar with the example text "oil spill\* mediterranean" and a dropdown menu for "Select a database" set to "All Databases".

The "Searches and alerts" dropdown menu is open, showing a list of saved searches and alerts. The list includes:

- fracking 3
- zika virus
- psoriasis
- Esteve
- general practice
- see all...
- Citation alerts
- Journal alerts

The "Saved Searches" table is displayed below the search bar. It has columns for "Saved Search", "Database", "RSS Feed", "Alert Status", "Alert Options", and "Edit". The table contains five rows of saved searches:

Saved Search	Database	RSS Feed	Alert Status	Alert Options	Edit
Name: % records no funding Description: Query: #2 not #1 <a href="#">Open</a>	Web of Science Core Collection		OFF Created: 2018-02-20 Last Run: 2018-02-22 Expires: -- <a href="#">Activate</a>	E-mail Address: rachel.mangan@thomsonreuters.com Type: Author, Title, Source Format: Plain Text Frequency: Daily	<a href="#">Edit</a>
Name: Esteve Description: Query: #19 NOT #14 <a href="#">Open</a>	Web of Science Core Collection		OFF Created: 2018-04-09 Last Run: 2018-04-10 Expires: -- <a href="#">Activate</a>	E-mail Address: rachel.mangan@thomsonreuters.com Type: Author, Title, Source Format: Plain Text Frequency: Daily	<a href="#">Edit</a>
Name: Radcliffe journal Description: Query: WOS:000418940300056, WOS:000414345700001, WOS:000413982200004, WOS:000396503600010, WOS:000411220000006, WOS:0004143263000096, WOS:000392211200008, WOS:000402058800005, WOS:000405527500003, WOS:000417925900001... <a href="#">Open</a>	Web of Science Core Collection		ON Created: 2018-06-27 Last Run: 2018-06-27 Expires: 2018-12-12 <a href="#">Renew</a>	E-mail Address: rachel.mangan@clarivate.com Type: Full Record Format: Plain Text Frequency: Monthly	<a href="#">Edit</a>
Name: abadia j Description: Query: Identificadores de autores: (0000-0002-7464-0217) Refined By: Open Access: (GREEN PUBLISHED) <a href="#">Open</a>	Web of Science Core Collection		EXPIRED Created: 2018-02-14 Last Run: 2018-03-02 Expired: 2018-08-01 <a href="#">Renew</a>	E-mail Address: rachel.mangan@thomsonreuters.com Type: Full Record Format: Plain Text Frequency: Monthly	<a href="#">Edit</a>
Name: biodiesel Description: Query: Tema: (antioxidant biodiesel) Refined By: Open Access: (GOLD) <a href="#">Open</a>	Web of Science Core Collection		ON Created: 2018-04-19 Last Run: 2018-04-19 Expires: 2018-10-04 <a href="#">Renew</a>	E-mail Address: rachel.mangan@clarivate.com Type: Full Record Format: Plain Text Frequency: Daily	<a href="#">Edit</a>

Each saved search displays the name and description given by the user at the time it was saved, and also the search query used. In addition, the database in which the saved search was created, its RSS Feed options, Alert Status and the chosen Alert Options are listed.

RSS feeds may be set up via the RSS logo link.

Saved searches may also be edited or deleted and remain active for an initial 168-day period. They may be renewed at any time during this period, which keeps the alert active for a further 168 days from the point of renewal.

Citation Alerts and Journal Alerts are also managed from the same page, via the relevant tabs.

Saved Search files saved locally may be opened via the Browse button at the bottom of the page.

#### *Running a Saved Search*

After a Saved Search has been opened, it may be run again. There is an additional option at that point to select the database, timespan and settings on which to perform the saved search. These revisions may be set as a new default if required.

All search sets pertaining to the opened history item are displayed, with the number of records under each set listed and hyperlinked.

#### *Deleting Sets*

The Saved Searches and Alerts page offers the possibility to delete sets of records. When an attempt is made to delete sets, a check is performed to determine whether any Dependent Sets are involved. A Dependent Set is one which is referenced in another set.

Sets selected for deletion which are not referenced in other sets are deleted. If, however, a set is referenced in a set that is not selected for deletion, the product returns an error message. The affected set combinations are marked, and the user is invited to verify the selection.

## MARKED LISTS

The Marked List page displays the records marked from either the Results page or the Full Record page. The user has the option to select records from the Web of Science™ Core Collection Marked List (or from the “All Databases Marked List”) to output. The types of bibliographic fields available for output reflect the source database.

Search Search Results Tools ▾ Searches and alerts ▾ Search History Marked List 4,473

**Marked List 4,473 records** | View Derwent Compounds Marked List: 0 compounds

Save Open/Manage Clear

**4,473 total records on the Marked List**  
Output author, title, source, abstract, and times cited for all records in the Marked List.

**4,473 records from Web of Science Core Collection**  
Output complete data from this product for these records.

Output Records [ - Hide Output Options ] | 5K

**Step 1: Select records.**  
☒ All records in this list (up to 500)  
☐ All records on page  
☐ Records  to

**Step 2: Select content.**  
Select from the fields below:

**Step 3: Select destination.** [Learn about saving to bibliographic software]  
  Save to EndNote online ▾

☐ Select All | [Reset](#)

<input checked="" type="checkbox"/> Author(s) / Editor(s)	<input checked="" type="checkbox"/> Title	<input checked="" type="checkbox"/> Source	<input checked="" type="checkbox"/> Conference Information
<input type="checkbox"/> Abstract*	<input type="checkbox"/> Cited References*	<input type="checkbox"/> Document Type	<input type="checkbox"/> Conference Sponsors
<input type="checkbox"/> Addresses	<input checked="" type="checkbox"/> Times Cited	<input type="checkbox"/> Keywords	<input type="checkbox"/> Publisher Information
<input checked="" type="checkbox"/> ISSN / ISBN	<input type="checkbox"/> Cited Reference Count	<input type="checkbox"/> Source Abbrev.	<input type="checkbox"/> Page Count / Chapter Count
<input type="checkbox"/> IDS Number	<input type="checkbox"/> Language	<input type="checkbox"/> Web of Science Categories	<input type="checkbox"/> Research Areas
<input type="checkbox"/> Funding Information	<input checked="" type="checkbox"/> Accession Number	<input checked="" type="checkbox"/> Author Identifiers	<input type="checkbox"/> Usage Count
<input checked="" type="checkbox"/> PubMed ID	<input type="checkbox"/> Open Access	<input type="checkbox"/> Hot Paper	<input type="checkbox"/> Highly Cited

\*Selecting these items will increase the processing time.

Sort by: [Date](#) Times Cited Usage Count  ▾

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[Create Citation Report](#)  
[Analyze Results](#)

### Output Records from the All Databases Marked List

The user may output summary information for up to 500 records from the All Databases Marked List. All records on list (up to 500), all on page, or a specified range of records can be selected.

Default output includes data for the following fields.

- Author
- Title
- Source
- Times Cited
- ISSN/ISBN
- Author Indentifiers
- Abstract
- Usage Count

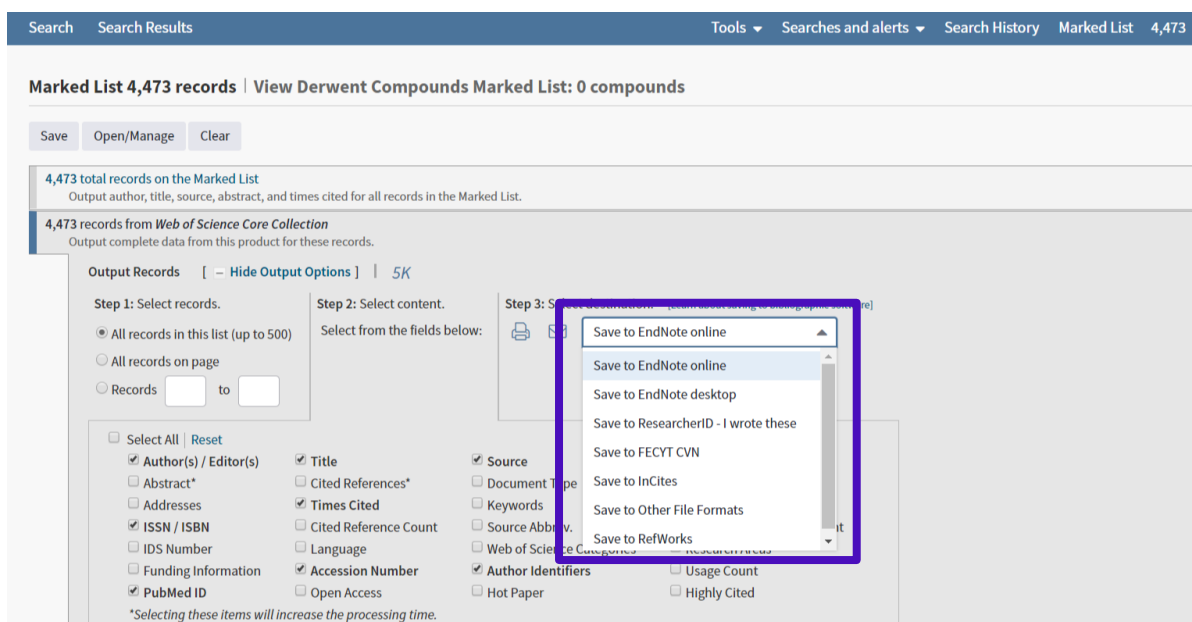
All except Abstract and Usage Count are selected by default.

### Output Records from Web of Science™ Core Collection Marked List

Records from Web of Science™ Core Collection may be outputted once the specific list has been selected. All records on the list (up to 500), all on page, or a specified range of records can be selected. Data fields are then selected. The most popular contextual fields are selected by default. User has the option to Select All fields.

The output destination options are as follows:

- Print
- E-Mail
- Save to EndNote online
- Save to EndNote desktop
- Save to ResearcherID - I Wrote These Publications
- Save to Other File Formats



All records added to the Marked List are added to the Marked List of Web of Science™ Core Collection.

- A record added from the Results page or the Full Record page of Web of Science™ Core Collection is added to the Web of Science Marked List and to the All Databases Marked List.
- A Web of Science™ Core Collection record added from the Full Record page while in the All Databases function, is added to the Web of Science Marked List and to the All Databases Marked List.
- A record from the All Databases Results page will be added to the Marked List of the product with the highest precedence within the host institution's subscription. The record is also added to the All Databases Marked List.

### *Marked List Button*

A Marked List button is assigned to a marked item to show that its marked status. This button is only displayed in the database product in which it was marked.

### *Marked List Count*

The number of records that can be added to the Marked List is 5,000 records per institution. 5,000 records can be selected for a single product or the number can be split among all products in the institutional subscription.

### *Marked List Output Options*

In addition to the options to output to Print and E-mail, Marked List records may be sent to an EndNote Online or EndNote Desktop library. To use this feature, the user must register and sign in to their EndNote Online account. If an EndNote library has not already been created, it is possible to do so at this stage.

### *Save to ResearcherID – I wrote these*

One further option is to save records to ResearcherID. This feature allows the user (or an authorized administrator) to add their published works to their publication list in ResearcherID. This feature can be used to claim records as the user's own works. Having claimed their works found in Web of Science™ Core Collection, the user can then complete and update their ResearcherID Profile to include all their works.

The user then certifies that they are the author (or an administrator) of the selected document(s). If the user is signed in, the system takes the user to a processing overlay and adds the selected record(s) to the publication list. If the user is not signed in, a prompt to sign in to ResearcherID is displayed. Once signed in, the system sends the user to a processing overlay and adds the selected record(s) to the publication list. If the user is not a registered member of ResearcherID, they can register with ResearcherID at this stage, using a valid e-mail address.

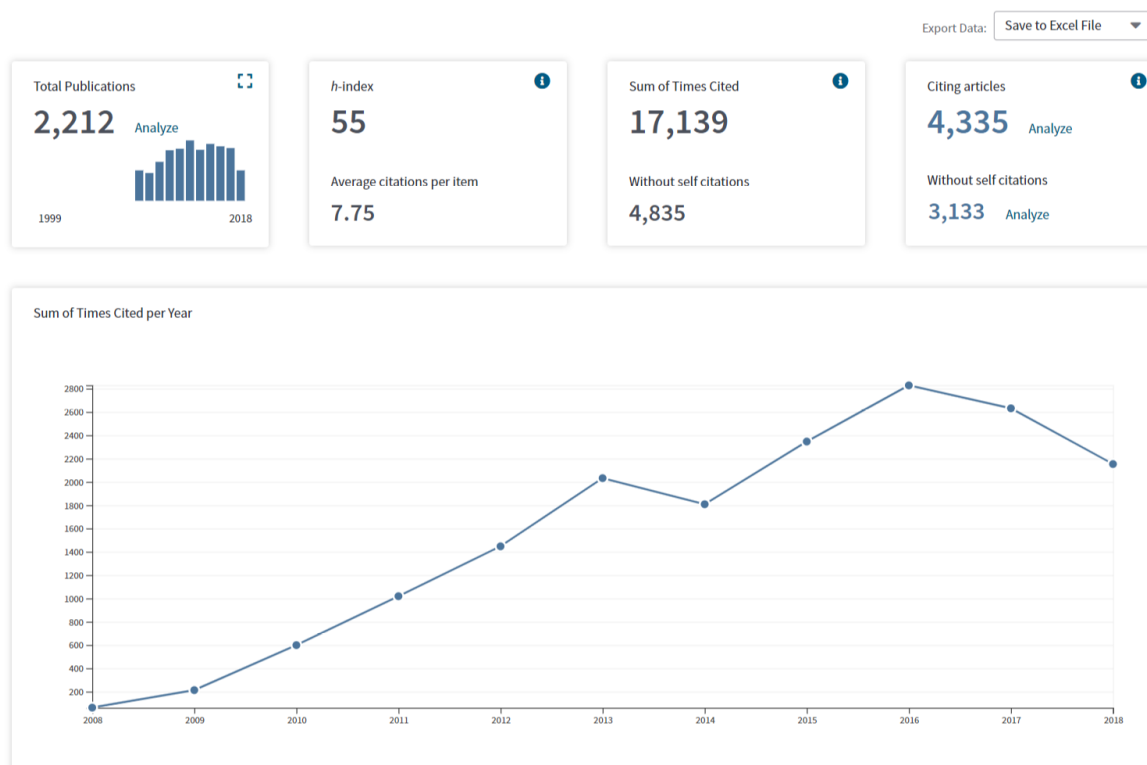
### *Save to Other File Formats*

- **Save to File: Other Reference Software**  
This option allows user to export selected records to third-party reference software such as RefWorks, Sente, Bibloscape, or similar reference software. User should:
  1. Save the file to the hard drive or to the desktop. The product automatically saves the file as an ASCII text file and names the file savedrecs.txt. Each field within the file begins with a two-character tag that identifies the type of data.
  2. Open a reference software.
  3. Select the Import option.
  4. Select ISI (Institute for Scientific Information) for the Import Filter / Data Source if this option is available.
  5. Select the savedrecs.txt file that you saved to your hard drive or to your hard drive.
- **Save to File: HTML**  
HTML file suitable for viewing with a Web browser. Field data are in a table. The first column contains the two-character field tag and the second column contains the field data.

- **Save to File: Plain Text**  
ASCII text file. Each field is prefaced by a two-character field tag. The system saves the document as a text file (for example, savedrecs.txt). Open a saved document using Microsoft® Wordpad, Microsoft Word, or another authoring tool. *Do not* use Notepad because this tool does not properly format the field tags.
- **Save to File: Tab-delimited (Win)**  
ASCII text file. Each field in the file is delimited by a tab. Compatible with the Microsoft® Windows® operating system.
- **Save to File: Tab-delimited (Mac)**  
ASCII text file. Each field in the file is delimited by a tab. Compatible with the Apple Macintosh® operating system.
- **Save to File: Tab-delimited (Win, UTF-8)**  
Saves output data in a tab-delimited format with UTF-8 (Unicode Transformation Format - 8 bit) encoding and carriage return linefeeds. Compatible with the Microsoft® Windows® operating system.
- **Save to File: Tab-delimited (Mac, UTF-8)**  
Saves output data in a tab-delimited format with UTF-8 (Unicode Transformation Format - 8 bit) encoding and carriage return linefeeds. Compatible with the Apple Macintosh® operating system.  
**Important Message ...** If you select Save to Plain Text, the system saves the document as a text file (for example, savedrecs.txt). We recommend that you open your saved document using Microsoft® Wordpad. *Do not* use Notepad because this tool does not properly format the field tags.
- **Save to BibTeX**  
Plain text file format with a .bib extension. A tool that allows user to format and process lists of references in conjunction with LaTeX documents.  
The format is a field label followed by an equal (=) sign. The data is enclosed in either a single pair of braces ( { } ) or a double pair of braces followed by a comma. For example:  
@article{ ISI:000251926400003  
Author = {Smith, AB},  
Journal = {{Cell Biology}},  
Year = {2007},  
Volume = {{22}},  
Note that each record starts with @article followed by a unique publication ID.

## CITATION REPORT

The feature is available for Web of Science™ Core Collection as well as for the other citation databases included in the Web of Science platform (Biosis Citation Index, Chinese Science Citation Index, Russian Citation Index, SciELO)



The Citation Report provides aggregate citation statistics for a set of search results. These statistics include:

- The total number of results found (Results Found field).
- The total number of times all records have been cited (Sum of Times Cited field).
- The total number of citations to all results found in the results set minus any citation from articles in the set (Sum of Times Cited without Self-Citations field).
- The total number of citing items to any of the items in the set of search results (Citing Articles field).
- The citing items minus any item that appears in the set of search results (Citing Articles without Self-citations field).
- The average number of times a record has been cited (Average Citations per Item field).
- The total number of times a record has been cited for all years in the results set (Total column).
- The h-index count that is based on the list of publications ranked in descending order by the Times Cited count.

Each of the abovementioned indicators has an associated help file.



The lower section of “Citation Report” screen appears as below and links to the citing articles are provided.

Sort by: **Times Cited** Date

More

Publication Date -- oldest to newest

Recently Added

Times Cited -- lowest to highest

First Author -- A to Z

First Author -- Z to A

Source Title -- A to Z

Source Title -- Z to A

Use the checkboxes to remove or restrict to items published by

1. **Hereditary angioedema**  
By: Zuraw, Bruce L.  
NEW ENGLAND JOURNAL OF MEDICINE Volume: 363 Issue: 20 Pages: 1921-1926 Published: SEP 4 2008

2. **Icatibant, a New Bradykinin-Receptor Antagonist, in Hereditary Angioedema**  
By: Cicardi, M.; Banerji, A.; Bracho, F.; et al.  
NEW ENGLAND JOURNAL OF MEDICINE Volume: 363 Issue: 6 Pages: 532-541 Published: AUG 5 2010

3. **Nanofiltered C1 Inhibitor Concentrate for Treatment of Hereditary Angioedema**  
By: Zuraw, Bruce L.; Busse, Paula J.; White, Martha; et al.  
NEW ENGLAND JOURNAL OF MEDICINE Volume: 363 Issue: 6 Pages: 513-522 Published: AUG 5 2010

4. **Efficacy of human C1 esterase inhibitor concentrate compared with placebo in acute hereditary angioedema attacks**  
By: Craig, Timothy J.; Levy, Robyn J.; Wasserman, Richard L.; et al.  
JOURNAL OF ALLERGY AND CLINICAL IMMUNOLOGY Volume: 124 Issue: 4 Pages: 801-808 Published: OCT 2009

5. **Evidence-based recommendations for the therapeutic management of angioedema owing to hereditary C1 inhibitor deficiency: consensus report of an International Working Group**  
By: Cicardi, M.; Bork, K.; Caballero, T.; et al.  
Group Author(s): Hawk Hereditary Angioedema Int Wo  
ALLERGY Volume: 67 Issue: 2 Pages: 147-157 Published: FEB 2012

2015	2016	2017	2018	2019	Total	Average Citations per Year
2346	2828	2631	2153	0	17139	1558.09
39	46	29	15	0	381	34.64
36	32	30	21	0	309	34.33
29	25	21	9	0	248	27.56
23	23	12	9	0	235	23.50
45	33	26	14	0	233	33.29

## Results and Citation Counts

Records on the Results page are sorted by Times Cited -- highest to lowest by default. The results can be sorted differently by selecting another sort option from the Sort-by menu located at the top and bottom of the table.

The columns to the right of each record show the number of citing articles in each year. Previous years and future years can also be seen with the arrow keys.

All citing years are shown based on the timespan selected in the original search.

The top number in the Total column is the total number of citing articles for all years in the results set. The figure is calculated by adding the total number of citations for each year.

A total count is calculated for each record in the Citation Report table using the same formula as shown above.

The number in the Total column for a particular record is hyperlinked to allow the user to view all citing articles.

The set of results can be modified and a new citation report generated, for example if the user wishes to remove certain records from the Citation Report. This would also generate a new Citation Report based on results that have at least one citing article.

### ***Average Citations Per Year***

This number indicates the average number of citations to articles in the results set since the articles were published. It is a simple formula in which the number of citations in the Total column is divided by the number of years in the Year columns.

For example:

Total Column = 307

Number of Years = 11

Average Citations Per Year = 27.91

### ***Citation Report Graphs***

#### ***Published Items in Each Year***

This graph shows how many items in the set were published each year. It shows which years produced the largest number of papers in the set and which years produced the smallest number. The data is based on the timespan selected from the Search page.

#### ***Citations in Each Year***

This graph shows how many citations were made each year to any items in the set. It shows which years produced the largest number of citing articles and which years produced the smallest number. The data is based on the timespan selected from the Search page.

### ***Citation Report Aggregate Statistics***

#### ***Results found***

This field shows the total number of records in the results set. It is based on the timespan selected to do the original search.

#### ***Sum of Times Cited***

This field displays the total number of citations (cited references) to all of the items found in the results set. This is the sum of the Total column, which displays the total number of citing articles for all years in the Citation Report table.

#### ***Sum of Times Cited without Self-Citations***

This field displays the total number of citations (cited references) to all of the items found in the results set minus any citation from articles in the set.

#### ***Citing Articles***

This field displays the total number of citing articles for all items in the set of search results. This is hyperlinked to allow the user to view the citing articles.

The number of citing articles retrieved may be smaller than the sum of the Times Cited count because an article may cite more than one item in the set of search results.

#### *Citing Articles without Self-Citations*

This field displays the total number of citing articles minus any article that appears in the set of search results on the Citation Report. This is hyperlinked so that the user may view a list of these results.

#### *Average Citations per Item*

This field displays a simple formula that calculates the average number of citing articles for all items in a set. It is the sum of the Times Cited count divided by the number of results found.

For example:

Sum of the Time Cited: 967

Results found: 55

$967 / 55 = 17.58$

#### *h-index*

This field displays the h-index count and is based on a list of publications ranked in descending order by the Times Cited count.

The h-index is indicated by an orange horizontal line going through the Year / Total Year columns. The number of items above this line, which is "h" have at least "h" citations. For example, an h-index of 20 means there are 20 items that have 20 citations or more. This metric is useful because it discounts the disproportionate weight of highly cited papers or papers that have not yet been cited.

The h-index factor is based on the depth of years of your product subscription and your selected timespan. Items that do not appear on the Results page will not be factored into the calculation. If the subscription depth is 10 years, then the h-index value is based on this depth even though a particular author may have published articles more than 10 years ago. Moreover, the calculation only includes items in the product in question. Books and articles in non-covered journals are not included.

#### *Output Records*

Output includes a five-year range that appears on the Citation Report.

The records may be sorted in a number of ways, and an output option selected.

Output options include Print; E-mail (which sends up to 500 records to one or more e-mail addresses); Text File, from the Send To menu, which saves records to a .txt file; Excel File from the Send To menu to export records to Excel using tabs as delimiters. The output includes graphs and all calculation tables displayed in the Citation Report.

10.

Fatal laryngeal attacks and mortality in hereditary angioedema due to C1-INH deficiency

By: Bork, Konrad; Hardt, Jochen; Witzke, Guenther

JOURNAL OF ALLERGY AND CLINICAL IMMUNOLOGY Volume: 130 Issue: 3 Pages: 692-697 Published: SEP 2012

Select Page

Save to Excel File

32	40	22	12	0	148	21.14
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Sort by: Times Cited

Date

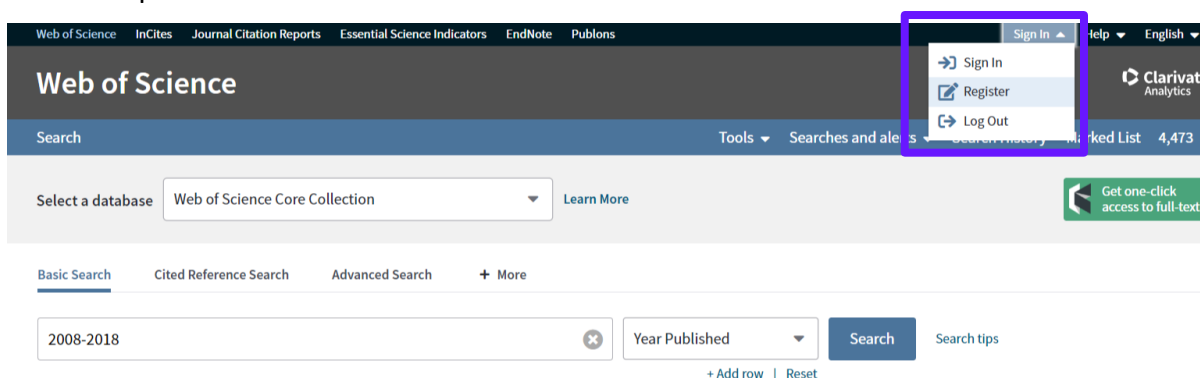
More

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## ROAMING ACCESS

Web of Science™ Core Collection can be accessed even remotely, exploiting **user credentials** or setting up a **proxy server**.

Roaming access with the use of own credentials is automatic. Any registered user (register button has been added to the site wide toolbar, see below) to the platform within own IP network (accessing through an IP entitled for his/her institution to the subscription of WoS content), will be able to access to the same content set for six months, even out of institutional network. After this six-month period, credentials will expire unless another institutional access will be performed. The roaming access time-period is in-fact renewed any time a user accesses the WoS platform within own entitled network.



[Roaming.webofscience.com](http://Roaming.webofscience.com)

 A screenshot of the Web of Science sign-in page. The page has a dark header with the 'Web of Science' logo and 'Clarivate Analytics' text. The main content area is titled 'Please Sign In to Access Web of Science'. It is divided into two main sections: 'REGISTERED USERS SIGN IN' and 'INSTITUTIONAL USERS SIGN IN'. The 'REGISTERED USERS SIGN IN' section includes fields for 'Email Address' and 'Password', a 'Sign In' button, and a 'Remember me on this computer' checkbox. The 'INSTITUTIONAL USERS SIGN IN' section includes a dropdown menu for 'Select your group or region' and a 'Go' button. On the right side, there is a 'WEB OF SCIENCE' section with a description of the platform and a list of features: Premier Multidisciplinary Content, Emerging Trends, Subject Specific Content, Regional Content, Research Data, and Analysis Tools. Below this is a 'NOT REGISTERED?' section with a description of the benefits of registering.

Another way of accessing remotely WoS platform, is via setting a proxy server. Currently Clarivate Analytics recommends the use of two proxy servers:

- EZProxy (by OCLC). Version 5 and above
- WAM Proxy (by Innovative Interfaces)

Clarivate Analytics cannot certify all functionalities of Web of Science working with proxy servers”.

For additional information on EZ Proxy, see the EZ Proxy Support page at:

<https://www.oclc.org/en/ezproxy.html>

For additional information on WAM Proxy, contact the Innovative Interfaces support team at [helpdesk@iii.com](mailto:helpdesk@iii.com) or (510) 655-6200 (Within the USA) or +15104506344 (Outside of the USA) for resolution.

For more information please visit:

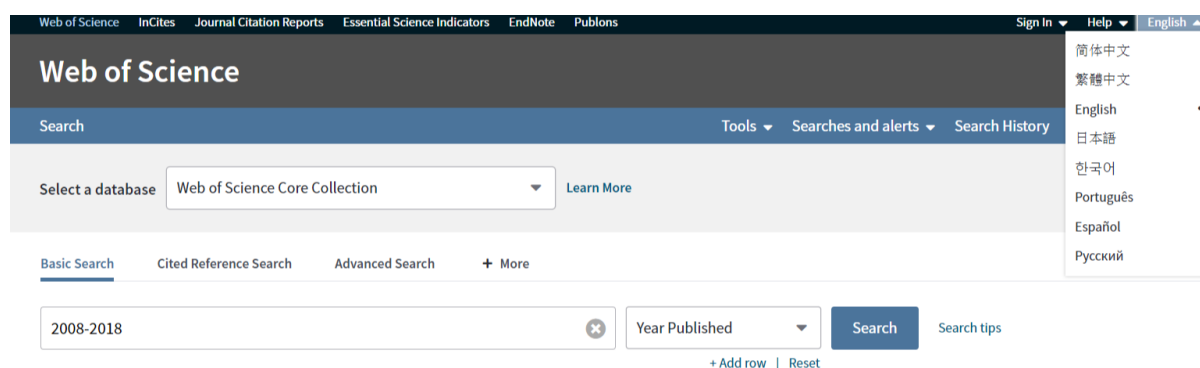
[https://support.clarivate.com/ScientificandAcademicResearch/s/article/Proxy-Servers-for-Web-of-Science-and-InCites-Products?language=en\\_US](https://support.clarivate.com/ScientificandAcademicResearch/s/article/Proxy-Servers-for-Web-of-Science-and-InCites-Products?language=en_US)

## INTERFACE LANGUAGES

Web of Science™ Core Collection, as any other databases on the Web of Science platform, is currently **available in 8 different Interface Languages**:

- Simplified Chinese
- Traditional Chinese
- English
- Japanese
- Korean
- Portuguese
- Spanish
- Russian

The desired language can be selected from the drop-down menu that that appears in the top toolbar (see below). The default value is English.



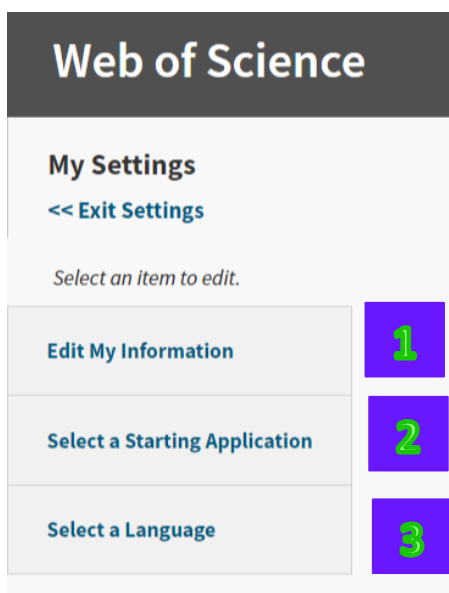
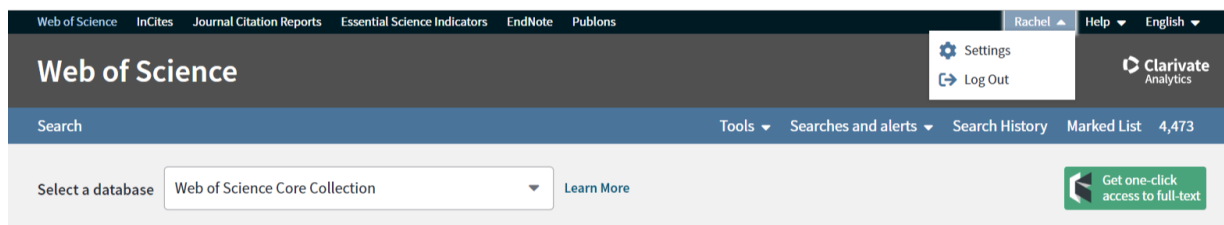
Generally, all items on a page will be translated. The following items, however, are not translated.

- Proper names
- Product names
- Trademarks, registered trademarks, and service marks
- Search examples
- Boolean operators (AND, OR, NOT) and proximity operators (NEAR and SAME)
- Two- and three-character field tags used in Advanced Search to formulate search queries

## SYSTEM SETTINGS

On Web of Science platform, registered users can set up some **specific platform settings** according their preference.

The modifiable settings can be accessed from the drop-down menu that that appears in the top toolbar (see below).



After having clicked on settings, user will be able to:

1. **Edit My Information** will allow users to change own password or register a new email, but will also put any users in the condition to sign in automatically (using cookies technology):

A screenshot of the 'Opt In/Opt Out' and 'Automatic Sign In' settings form. The form has two sections. The first section, 'Opt In/Opt Out', has two radio buttons: 'Receive training materials, notifications, announcements, and other materials by e-mail.' (selected) and 'Do not receive training materials, notifications, announcements, and other materials by e-mail.' The second section, 'Automatic Sign In', has two radio buttons: 'Sign me in automatically. (Select this if you want to be signed in automatically each time you access Web of Science. This feature uses cookie technology.)' (selected) and 'I am using a public computer or do not wish to be signed in automatically (Users of public computers should select this option.)'. At the bottom, there are 'Submit Changes' and 'Cancel' buttons.



2. **Select a Starting Application** will allow users to automatically login into the preferred solution/database. Web of Science™ Core collection should select this database.

The screenshot shows the 'My Settings' page with a sidebar on the left containing links: '<< Exit Settings', 'Edit My Information', 'Select a Starting Application' (highlighted), and 'Select a Language'. The main content area is titled 'Select a Starting Application' and includes the instruction: 'The application you select will display automatically each time you sign in. Select the application you wish to view when you sign in. Click "Submit Changes" below when done.' Below this is a list of radio buttons for various databases, with 'Web of Science Core Collection' selected. At the bottom are 'Submit Changes' and 'Cancel' buttons.

**My Settings**  
<< Exit Settings

Select an item to edit.

- Edit My Information
- Select a Starting Application
- Select a Language

**Select a Starting Application**

The application you select will display automatically each time you sign in.  
Select the application you wish to view when you sign in.  
Click "Submit Changes" below when done.

- ☐ All Databases
- ☒ Web of Science Core Collection
- ☐ Biological Abstracts
- ☐ BIOSIS Citation Index
- ☐ BIOSIS Previews
- ☐ CAB Abstracts and Global Health
- ☐ Current Contents Connect
- ☐ Chinese Science Citation Database
- ☐ Data Citation Index
- ☐ Derwent Innovations Index
- ☐ FSTA - the food science resource
- ☐ Inspec
- ☐ KCI-Korean Journal Database
- ☐ MEDLINE
- ☐ Russian Science Citation Index
- ☐ Scielo Citation Index
- ☐ Zoological Record

Submit Changes Cancel

3. **Select a Language** will allow users to change the default interface language:

The screenshot shows the 'My Settings' page with a sidebar on the left containing links: '<< Exit Settings', 'Edit My Information', 'Select a Starting Application', and 'Select a Language' (highlighted). The main content area is titled 'Select a Language' and includes the instruction: 'The language you select will display automatically each time you sign in. Select the language you wish to see when you sign in. Click "Submit Changes" below when done.' Below this is a list of radio buttons for various languages, with 'English' selected. At the bottom are 'Submit Changes' and 'Cancel' buttons.

**Web of Science**

**My Settings**  
<< Exit Settings

Select an item to edit.

- Edit My Information
- Select a Starting Application
- Select a Language

**Select a Language**

The language you select will display automatically each time you sign in.  
Select the language you wish to see when you sign in.  
Click "Submit Changes" below when done.

- ☐ Chinese (Simplified)
- ☒ English
- ☐ Japanese
- ☐ Chinese (Traditional)
- ☐ Russian
- ☐ Spanish
- ☐ Korean
- ☐ Portuguese

Submit Changes Cancel

## INTEGRATION WITH DISCOVERY SERVICES

Any customer can request the discovery service provider to turn on Web of Science content as long as they subscribe to the Web of Science.

Clarivate Analytics is in partnerships with “Discovery Service<sup>48</sup>” providers (**Serials Solutions, Ex Libris and EBSCO**)<sup>49</sup> to make Web of Science data accessible from their discovery platforms to mutual customers.

All partnerships have been signed and Web of Science data are available from platforms reported below:

- Serials Solutions - **Summon**
- EBSCO - **EBSCO Discovery Service (EDS)**.
- Ex Libris - **Primo Central**

In the case of the platforms above reported, customers will conduct their search via a search box from within the respective discovery service. Web of Science content will be accessible from within their search results and can link over to the full Web of Science record:

All vendors will receive the same Web of Science content:

- Web of Science data – Science, Social Sciences, Arts & Humanities – 1989 to present
- Weekly delivery of WoS data and times cited counts
- Times cited counts viewable in WoS records
- Links to WoS from the discovery service
- Links to WoS full record
- Links to Citing Articles results list

OCLC Federated Search integration will also be shortly available.

Clarivate Analytics does not control how the content and capabilities are integrated into any of these vendor’s user interfaces and the integration of the Web of Science metadata into the Discovery System does not require any kind of entitlement in the Web of Science.

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<sup>48</sup> A **Discovery Service** harvests metadata that is integrated with other elements from other databases. When a user searches a Discovery Service, the search is not logged in the **individual product** until the user selects a specific record.

A **Federated Search system** uses a web service to simultaneously query and retrieve results from several different databases. When a user runs a search using Federated Search, the search is logged as a **Web Services session** and query in all the individual products.

<sup>49</sup> On October 2015 it has been announced the acquisition of Ex-Libris by EBSCO

## WEB OF SCIENCE REPORTING SYSTEM (WURS)

On 2014, the WURS (Web of Science<sup>50</sup> Reporting System) was redesigned and made accessible to institutional administrators, from the “Tools” dropdown menu (see picture below)

To become a Web of Science administrator, one can use the online form:

<http://ips.clarivate.com//info/wokusagereports/>

One needs to be registered in Web of Science prior to filling in the online form and states the same email in the form as used as the ID to Sign In into WoS. As a rule only institutional email domains can be designated WURS administrators [i.e. NOT free email accounts like hotmail, yahoo, etc.].

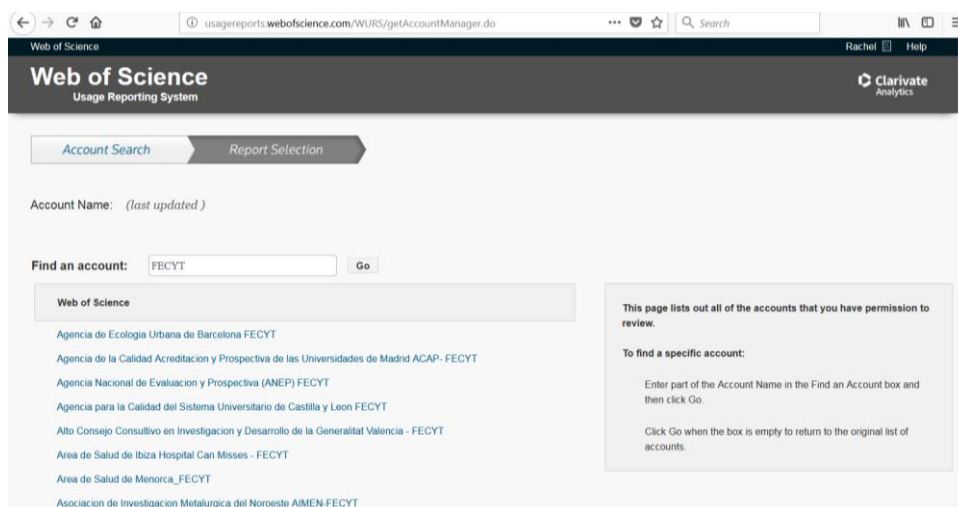
Once authorized, to access the data, enter the email address and password at either <http://usagereports.webofscience.com> or <http://webofknowledge.com>. If you use the latter URL, you will then need to select the "My Tools" tab at the top of the home page and then select "Usage Reports" option from the "My Tools" drop down menu.

The interface is straightforward and users can easily reach the “report page”:

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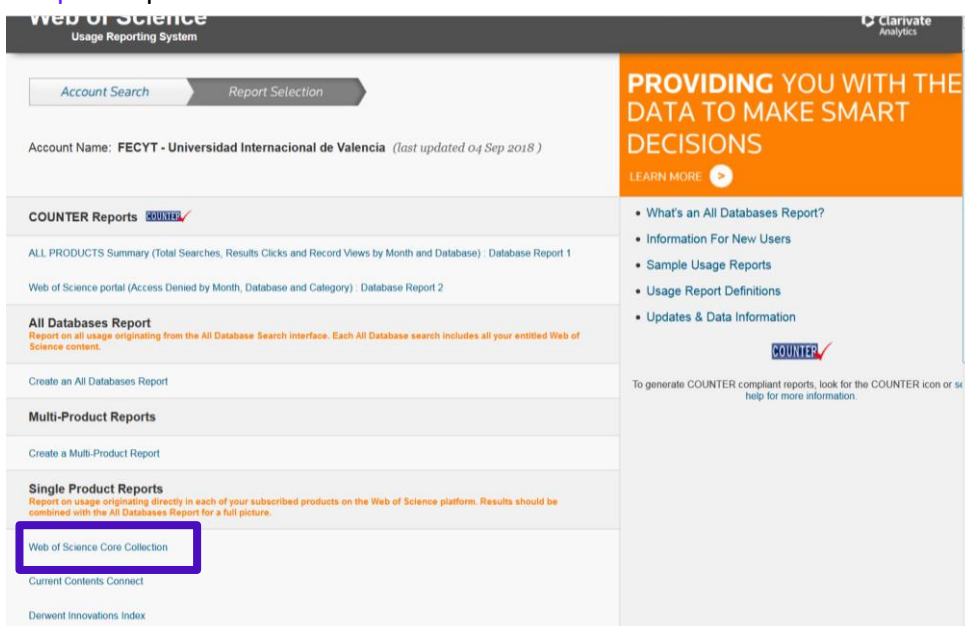
<sup>50</sup> Web of Knowledge was the name up to January 2014 of the Web of Science platform

## Step 1. Account search.



The “Account Search” step is related to multi-institution (consortia) admin, whilst single-institution admin will start navigating from “Report Selection”. Under “Report Selection” user can select different reports and in particular the Product Report on “Web of Science™ Core Collection”<sup>51</sup>.

## Step 2. Report Selection



After having selected the product report, user will be accessing a screen with the possibility to customize the report he/she is looking for:

<sup>51</sup> COUNTER (Counting OnLINE Usage of NeTworked Electronic Resources) are also available (see picture)

Account Name: **FECYT - Universidad Internacional de Valencia** (last updated 04 Sep 2018)

### Web of Science Core Collection Usage Report Settings

Select one: ☒ Summary Report For the month: **Aug 2018** 1

☐ Include User Credentials

☒ Create a Custom Summary Report From: **Oct 2016** To: **Aug 2018** 2

☒ Subsessions ☒ Records Printed

☒ Queries ☒ Records Emailed

☒ Citation Events ☒ Records Ordered

☒ Result Clicks ☒ TOCs Viewed

☒ Record Views ☒ Total Items Requested

☒ Records Exported

☒ Records Saved ☐ Include User Credentials 3

☒ Subsessions and Queries From: **Oct 2016** To: **Aug 2018**

☐ Include User Credentials

☒ Total Product Usage From: **Oct 2016** To: **Aug 2018** 4

**Create Report**

**1**

Monthly Summary Report. It summarizes activities on the product **per day (and per IP, on demand)**. See below a screenshot:

FILEHOMEINSERTPAGE LAYOUTFORMULASDATA REVIEWVIEWADD-INSGet Started

Paste

B

I

U

Font

Wrap Text

Alignment

Merge & Center

Date

%

Number

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Mangan, Rachel E. (P&Science) -

A1

Web of Science? Core Collection Summary Usage Report for May 2018

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
1	Web of Science? Core Collection Summary Usage Report for May 2018																	
2																		
3	Date	Credentials	Subsession Queries	WS Subses	WS Querie	Total Subs	Total Quer	Citation E	Result Clic	Records Vi	Records E	Records S	Records P	Records O	Records T	TOCs View	Total Items R	
4	01/05/2018	S0372.FECYT.ES	49	180	0	0	49	180	45	202	115	1	39	8	0	0	0	163
5			49	180	0	0	49	180	45	202	115	1	39	8	0	0	0	163
6	02/05/2018	S0372.FECYT.ES	92	332	0	0	92	332	50	384	194	214	216	0	20	0	0	644
7			92	332	0	0	92	332	50	384	194	214	216	0	20	0	0	644
8	03/05/2018	S0372.FECYT.ES	99	561	0	0	99	561	52	459	239	66	6	0	0	0	1	312
9			99	561	0	0	99	561	52	459	239	66	6	0	0	0	1	312
10	04/05/2018	S0372.FECYT.ES	86	331	0	0	86	331	26	334	140	180	216	0	0	0	0	536
11			86	331	0	0	86	331	26	334	140	180	216	0	0	0	0	536
12	05/05/2018	S0372.FECYT.ES	21	136	0	0	21	136	18	101	43	145	0	0	0	0	0	188
13			21	136	0	0	21	136	18	101	43	145	0	0	0	0	0	188
14	06/05/2018	S0372.FECYT.ES	36	277	0	0	36	277	34	272	140	0	0	0	1	0	0	141
15			36	277	0	0	36	277	34	272	140	0	0	0	1	0	0	141
16	07/05/2018	S0372.FECYT.ES	180	1514	0	0	180	1514	60	1171	263	65	19	6	53	0	0	406
17			180	1514	0	0	180	1514	60	1171	263	65	19	6	53	0	0	406
18	08/05/2018	S0372.FECYT.ES	119	563	0	0	119	563	84	571	315	31	38	184	0	0	1	569
19			119	563	0	0	119	563	84	571	315	31	38	184	0	0	1	569
20	09/05/2018	S0372.FECYT.ES	128	637	1	1	129	638	155	755	256	165	140	6	0	0	0	567
21			128	637	1	1	129	638	155	755	256	165	140	6	0	0	0	567
22	10/05/2018	S0372.FECYT.ES	117	562	0	0	117	562	107	538	241	62	53	5	10	0	0	371
23			117	562	0	0	117	562	107	538	241	62	53	5	10	0	0	371
24	11/05/2018	S0372.FECYT.ES	149	1114	0	0	149	1114	74	1033	354	69	32	0	351	0	0	806
25			149	1114	0	0	149	1114	74	1033	354	69	32	0	351	0	0	806
26	12/05/2018	S0372.FECYT.ES	27	131	0	0	27	131	24	201	125	0	26	0	0	0	0	151
27			27	131	0	0	27	131	24	201	125	0	26	0	0	0	0	151
28	13/05/2018	S0372.FECYT.ES	44	174	0	0	44	174	30	205	189	398	47	124	0	0	0	758
29			44	174	0	0	44	174	30	205	189	398	47	124	0	0	0	758

2

**Custom Summary Report.** It summarizes activities on the product **per month (and per IP, on demand)**. The report can be launched for different time-ranges and custom activities. See below a screenshot:

Create a Custom Summary Report From: May 2018 To: Jul 2018

☒ Subsessions  
☒ Queries  
☒ Citation Events  
☒ Result Clicks  
☒ Record Views  
☒ Records Exported  
☒ Records Saved

☒ Records Printed  
☒ Records Emailed  
☒ Records Ordered  
☒ TOCs Viewed  
☒ Total Items Requested  
☒ Include Web Services Subsessions and Queries  
☐ Include User Credentials

1539177259.csv - Excel

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Web of Science? Core Collection Custom Summary Usage Report for May 2018-Jul 2018

Date	Subsession Queries	WS Subses	WS Querie	Total Subs	Total Quer	Citation Ev	Result Clic	Records Vi	Records E	Records S	Records Pr	Records O	TOCs View	Total Items Requested
May-18	3147	17445	5	11	3152	17456	1598	17183	7200	164815	7310	3269	525	0
Jun-18	1909	8783	6	7	1915	8790	1101	8330	4150	6032	118316	700	187	0
Jul-18	1221	4959	4	6	1225	4965	597	5339	2379	21441	10774	2671	125	0
Total	6277	31187	15	24	6292	31211	3296	30852	13729	192288	136400	6640	837	0

3

**Subsession and Queries Report.** It summarizes activities on the product **per different indexes<sup>52</sup>, per month (and per IP, on demand)**. The report can be launched for different time-ranges. See below a screenshot:

1539177386.csv - Excel

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Web of Science? Core Collection Subsessions and Queries Usage Report for Jan 2018-Aug 2018

Date	Arts & Humanities Cit	Book Citation Index-S	Book Citation Index-S	Conference Proceedi	Conference Proceedi	Current Chemical Rea	Emerging Sources Citi	Index Chemicus (IC)	Science Citation Inde
Jan-18	1611	11070	545	3593	547	3605	1600	10976	1597
Feb-18	1623	8951	1609	8944	1611	8929	1610	8956	1616
Mar-18	1948	13085	1944	13064	1945	13102	1946	13122	1949
Apr-18	2024	12864	2020	12844	2020	12854	2024	12882	2024
May-18	2668	17021	2658	17012	2658	17080	2666	17037	2665
Jun-18	1425	8423	1417	8347	1424	8416	1425	8459	1428
Jul-18	896	4647	897	4670	893	4647	897	4680	897
Aug-18	535	2623	532	2639	532	2622	534	2611	533
Total	12730	78684	11622	71113	11630	71255	12702	78723	12709

<sup>52</sup> Including ESCI – Emerging Source Citation Index



**Total Product Usage Report.** It summarizes activities on the **Web of Science and Web of Science™ Core Collection including Web Services, per month.** The report can be launched for different time-ranges. See below a screenshot:

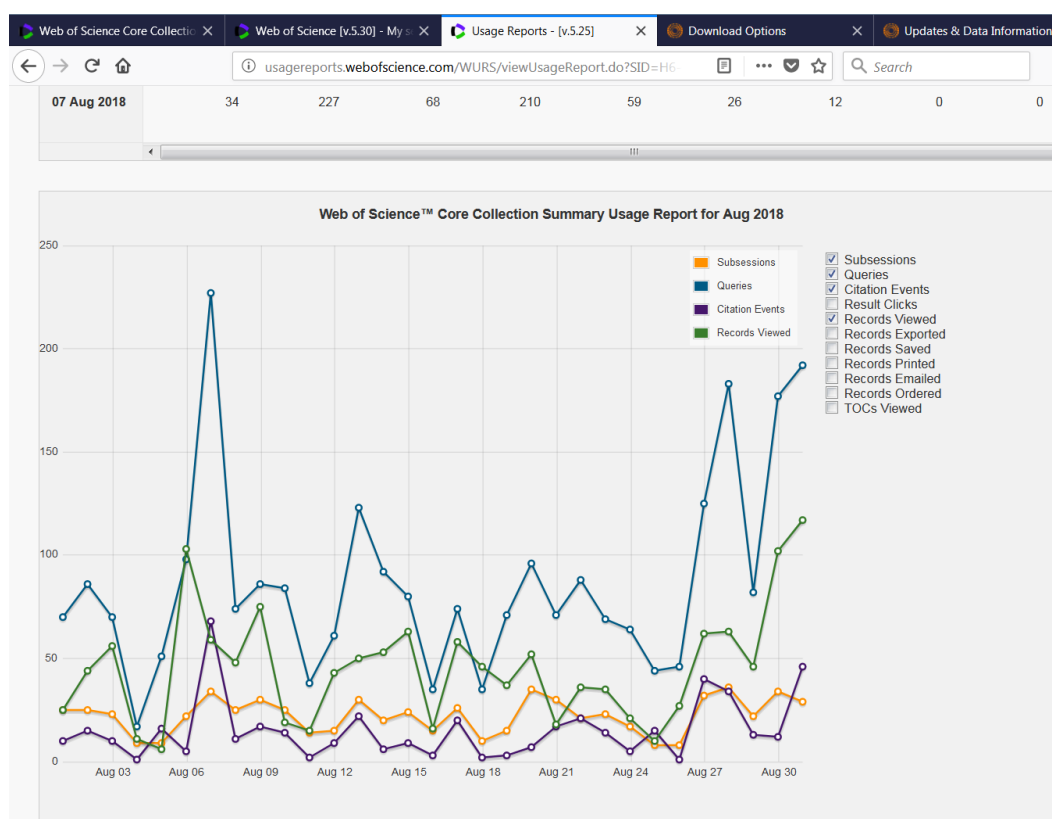
1539177600.xlsx [Read-Only] - Excel

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Web of Science™ Core Collection Total Product Usage Report for Oct 2015-Aug 2018

		Total	Oct 2015	Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	Jun 2016	Jul 2016
Platform	User Activity											
All Databases Web of Science™ Core Collection	Subsessions	37561	1274	1401	1235	1119	1298	1846	2077	1806	1281	764
All Databases Web of Science™ Core Collection	Queries	195593	7776	8184	6681	6824	8009	12490	11872	10171	6680	4222
All Databases Web of Science™ Core Collection Web Services	Subsessions	0	0	0	0	0	0	0	0	0	0	0
All Databases Web of Science™ Core Collection Web Services	Queries	0	0	0	0	0	0	0	0	0	0	0
Web of Science™ Core Collection	Subsessions	54558	1285	1074	1069	818	1018	1116	1674	2053	1036	619
Web of Science™ Core Collection	Queries	283388	5625	4323	4736	3829	4880	4935	8057	10732	4228	2725
Web of Science™ Core Collection Web Services	Subsessions	1287	0	0	0	0	1	1	14	21	0	194
Web of Science™ Core Collection Web Services	Queries	1521	0	0	0	0	1	1	14	21	0	193

All reports can also be displayed in a graphical format (see below) and can exported and saved in different formats (XLSX, CSV, PDF)



For what concerns the terminology, find below the main terms. More info (and a glossary) can be found out in the Help Online <http://ipscience-help.thomsonreuters.com/usageReportingLive/generalInformationGroup/wosUsageReporting.html>

**Query**

A request that returns results from a database. A query is always recorded when a user clicks Search in a product. A query is also recorded when a set is created by an alert. Other queries are recorded by specific user actions in individual products.

A remote query is a query submitted to a database from a product outside Web of Science. For example, a query submitted from EndNote to Web of Science is reported as remote query.

Note: *Queries* are renamed *Searches* in COUNTER reports.

**Records Saved**

Number of records that are saved to a file when a user clicks Save to File.

**Records Viewed**

The number of full records displayed. Records in a summary list of results are not counted as records viewed.

A link-in from EndNote to a Web of Science record counts as a record viewed in Web of Science.

**Result Click**

A click originating from a set of search results.

**Session**

A successful logon or connection to the Web of Science portal. A successful logon or connection to a Web of Science Core Collection database is a subsession.

**Subsession**

A successful logon or connection to a database accessed through Web of Science



## WEB SERVICES

A web service is a piece of software that makes itself available over the internet. Typically, it uses a standardized XML messaging system XML is used to encode all communications to a web service. For example, a client invokes a web service by sending an XML message, and then waits for a corresponding XML response. As all communication is in XML, **web services are not tied to any one operating system or programming language**--Java can talk with Perl; Windows applications can talk with Unix applications.

Web services are used for:

- ✓ To retrieve or complete institution's existing information about own publications.
- ✓ To collect information from Web of Science (or other sources).
- ✓ To integrate with existing software (CRIS, authoring profile systems, etc.).
- ✓ To retrieve large amounts of data at once.
- ✓ To showcase recurring updated data.

Three different web services are sourced via Web of Science. Two of them are soap-based (WS LITE & PREMIUM), one is XRPC-based (AMR).

### WEB OF SCIENCE (WS) LITE

**WS LITE** is a web service that queries Web of Science™ Core Collection only, and **returns up to 10 basic bibliographic fields**. This service is usually free with a WoS subscription.

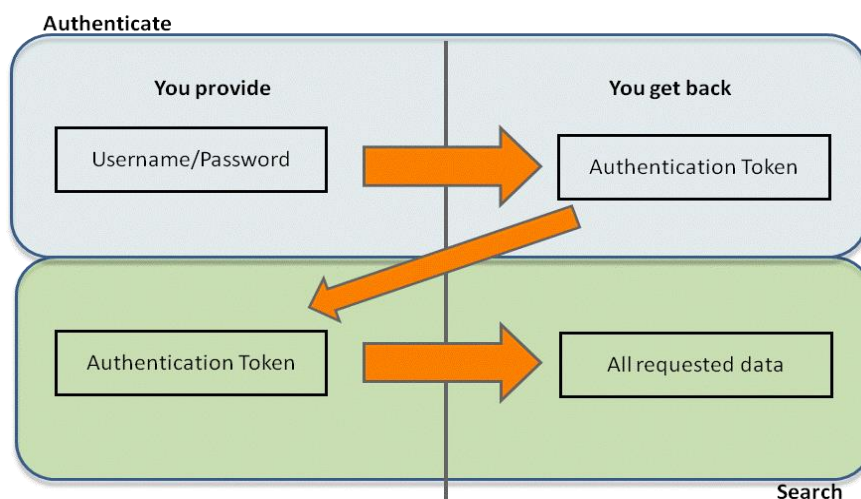
It contains two WebServices. The first Web Service is used only for authentication, returning a token which has to be added to the second Web Service call.

#### 1) WOKMWSAuthenticate

- 1.a) authenticate
- 1.b) closeSession

#### 2) WokSearchLite

- 2.a) search
- 2.b) retrieve
- 2.c) retrieveByld



WS LITE is returning these fields: UT, Article title, Journal issue, Article page span, Date of source publication, Year of source publication, Title of source publication, Volume of source publication, Author names, Author keywords Contributors' names and ResearcherID<sup>53</sup>, Document DOI, Article number, ISI Document Solution identifier, ISSN, ISBN.

#### WEB OF SCIENCE (WS) EXPANDED

**WS EXPANDED** (formerly referred as **PREMIUM**) is a web service that can query all Web of Science platform collections and **returns full record bibliographic fields, including times cited counts.**

WS PREMIUM is typically used to enrich existing data with extensive bibliographic information from the Web of Science™ Core Collection

Like WS LITE it contains two web services: WOKMWSAuthenticate and WokSearch. WS EXPANDED can returns the following fields (info)

<sup>53</sup> A contributor is a person or entity that has added the item to their My Publications list in ResesearcherID and made their My Publications list public.

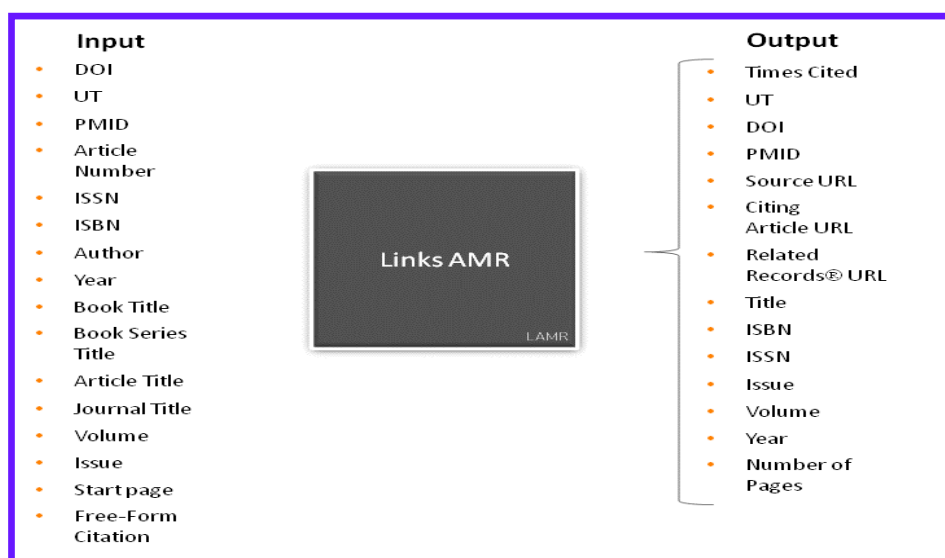
<b>FIELD</b>	<b>WS EXPANDED</b>
<b>UID (Unique Identifier)</b>	yes
<b>Title</b>	yes
<b>Issue</b>	yes
<b>Pages</b>	yes
<b>Publication Date</b>	yes
<b>DOI</b>	yes
<b>Source</b>	yes
<b>Volume</b>	yes
<b>Authors</b>	yes
<b>Author Keywords</b>	yes
<b>Times Cited</b>	yes
<b>Document Type</b>	yes
<b>Abstract</b>	yes
<b>Book Author</b>	yes
<b>Book Group Author</b>	yes
<b>Group Author</b>	yes
<b>Editor</b>	yes
<b>Conference Title</b>	yes
<b>Conference Location</b>	yes
<b>Conference Date</b>	yes
<b>Conference Sponsor</b>	yes
<b>Book Series</b>	yes
<b>Part Number</b>	yes
<b>Supplement</b>	yes
<b>Special Issue</b>	yes
<b>Meeting Abstract Number</b>	yes
<b>Article Number</b>	yes
<b>Cited References</b>	yes
<b>Conference Title</b>	yes
<b>Conference Location</b>	yes
<b>Conference Date</b>	yes
<b>Conference Sponsor</b>	yes
<b>Language</b>	yes
<b>Keywords Plus</b>	yes
<b>Reprint Address</b>	yes
<b>Address</b>	yes
<b>E-mail Addresses</b>	yes
<b>ResearcherID Number</b>	yes
<b>Funding</b>	yes

<b>Publisher</b>	yes
<b>Subject Category</b>	yes
<b>IDS Number</b>	yes
<b>ISSN</b>	yes
<b>ISBN</b>	yes
<b>Article Number</b>	yes
<b>Book DOI</b>	yes
<b>Book Chapter Count</b>	yes
<b>Related Records</b>	yes
<b>ORCID ID</b>	yes
<b>ALUM (Usage Indicators)</b>	yes
<b>Org Enhanced</b>	yes

## ARTICLE MATCH RETRIEVAL

**ARTICLE MATCH RETRIEVAL (AMR)** is a web service that can query Web of Science™ Core Collection and Journal Citation Report, and **returns most current times cited counts and links to specific articles** in the Web of Science, links to citing articles, links to related records, and links to Impact Factor trends.

This web services accepts the input and returns the output below:



## WEB SERVICES 2018

	WoS Lite	WoS Expanded	AMR
Description	This API supports rich searching across the fields of Web of Science and retrieving core article level metadata.	All capabilities and fields of the Lite API plus additional metadata, such as times cited, author addresses, author affiliations, <b>and PMID + ORCID/RID</b>	Enables real-time lookup of bibliographic metadata including identifiers against WoS to build article links to Web of Science from external systems
Technical	SOAP + XML REST + XML/JSON		HTTPS POST + XML
Entitlement/Auth	u/pToken		u/p
Data Scope	WoS Platform (depending on subscription)		Core Collection
Use Case	Discovery/Aggregation		Real-time data supplement
Documentation	<a href="https://developer.clarivate.com/">https://developer.clarivate.com/</a> (Swagger)		<a href="#">Link</a>

## CLARIVATE DEVELOPER PORTAL

Application Programming Interfaces, or APIs, allow programmatic access to content and tools, enabling customers to address use cases—such as data integration into their own internal systems— that cannot be solved purely through a product UI. Exposing APIs to customers is not new; product lines across the organization have been doing this for years. However, there was an opportunity to improve and streamline the access approval process, as well as increase customer discovery of API offering from across the business.

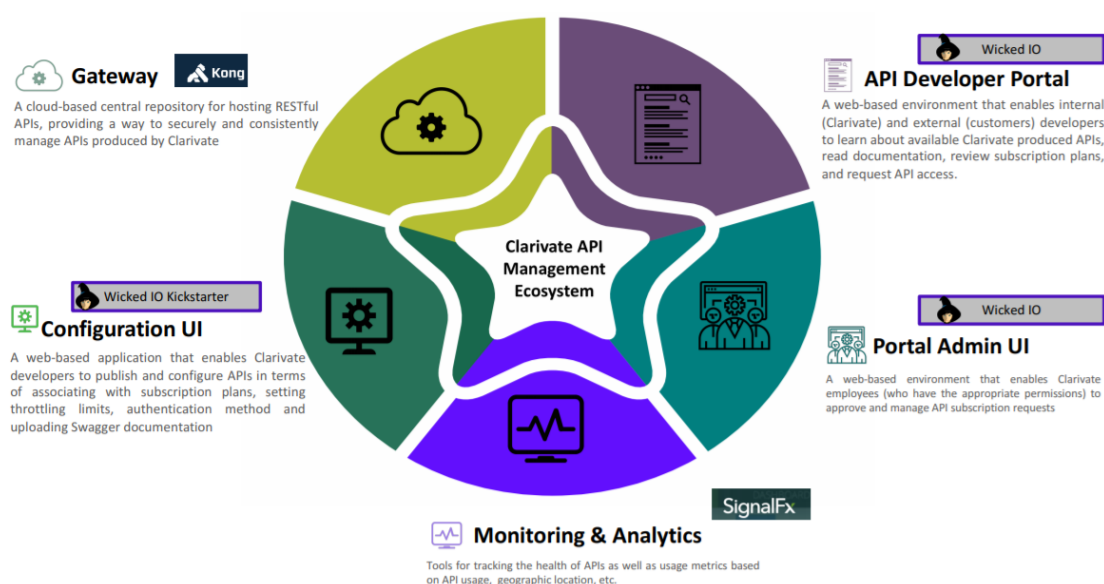
As of August 2018, the Developer Portal exposes APIs for products from across the CompuMark, IP and Standards, and Scientific and Academic Research BU's; additionally, APIs from Life Sciences and IP Management hosted elsewhere are promoted on the portal's homepage. These APIs are in varying stages of customer rollout, e.g., some are currently in limited release. For more details reach out to the respective product managers:

- EndNote ([Joel Franke](#))
- InCites (Joel Franke)
- Publons Reviewer Connect ([Tiago Barros](#))
- Web of Science (Joel Franke)

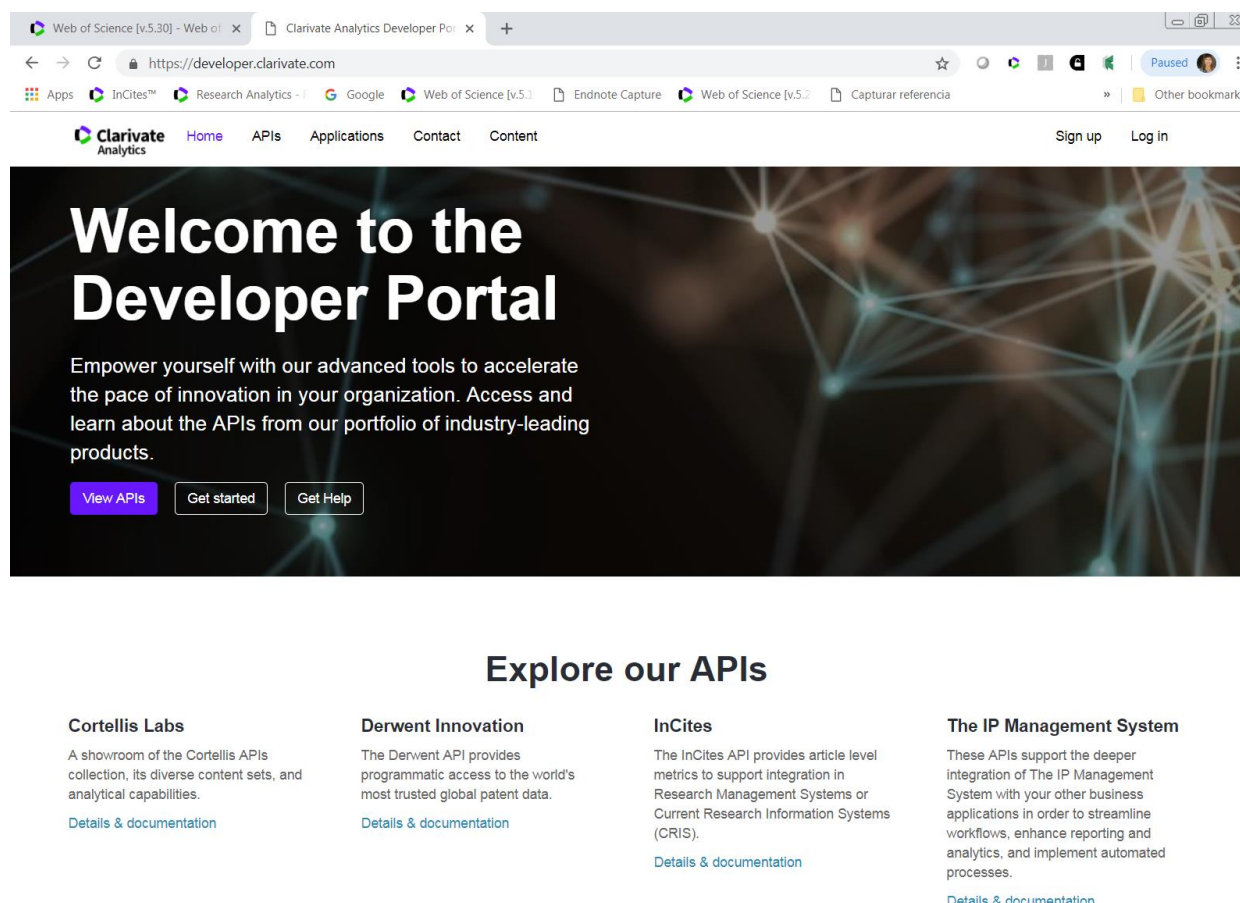
For more information go to:

- API Gateway & API Portal Overview --July 2018
  - <https://thelens.clarivate.com/docs/DOC-3498475>
- Clarivate API Portal Developer Lens group
  - <https://thelens.clarivate.com/groups/clarivate-api-developer-portal>

### The Clarivate API Management Ecosystem supports the entire API lifecycle



Access to Clarivate Developer Portal: <https://developer.clarivate.com/>



The API developer portal is an enterprise-wide resource. The homepage is used as a marketing vehicle, where we are able to promote APIs exposed through the portal, as well as those accessible elsewhere.

## DEVELOPER PORTAL API INDEX

The API Catalog is an index of all API's exposed through the developer portal. Visibility of APIs can vary based on API configuration (i.e., only viewable by certain users). However, current planning is that all customer facing APIs will be visible to signed in and not logged in users.

- Users can filter the catalog based on API category.
- Users can access additional API details from the catalog.

The screenshot shows the Clarivate Analytics Developer Portal API Index page. The page has a navigation bar with links to Home, APIs, Applications, Contact, and Content. The main heading is "APIs" with the subtitle "This is the index of available APIs." Below this, there is a note: "Click on an API below to learn more and view subscription options. Or find information about Scholar One Manuscripts, Cortellis, or Derwent Innovation APIs by clicking on the appropriate links. Note: The approval process may take a few days." On the left, there is a sidebar for "API Categories" with checkboxes for EndNote, InCites, Web of Science, The IP Management System, Publons, and Experiment. Below the categories are "Filter" and "Clear" buttons. The main content area displays a grid of API cards. Each card includes a gear icon, a key icon, a title, a description, and an "Information »" button. The APIs listed are: EndNote API, InCites Document Level Metrics API, Web of Science API Expanded, Web of Science API Lite, The IP Management System Test API, The IP Management System API, Publons Reviewer Connect API, and experiment.



Requesting access to APIs is a streamlined process:

### How to get started

- 1 Sign up for the portal**  
Create a user account for the Developer Portal. Because this site shares credentials with other Clarivate Analytics services, you may already have an existing account.
- 2 Register your application**  
Tell the API Portal which application you are working on. You'll need to register the application before requesting API access.
- 3 Subscribe to an API**  
Find the API you need for your application on the [APIs page](#). Select a plan, then subscribe to the API. For some plans, credentials are granted immediately; for others, administrative approval is required. Note: The approval process may take a few days.
- 4 Use the API\***  
Once credentials are received, you are ready to use the API in your application according to the subscribed plan.

## 1. Sign Up for the Portal

Sign in to continue with Clarivate Analytics Developer Portal


This service shares sign in credentials with other products you may use: Cortellis • Derwent Innovation • Developer Portal • Drug Research Advisor • EndNote online • InCites • Key Pathway Advisor • ResearcherID • Web of Science. Please sign in using your email address and password you use to access any of the above products.

Email address <input type="text" value="rachel.mangan@clarivate.com"/>	OR	Not a member yet?
Password <input type="password" value="*****"/>		<input type="button" value="Register"/>
<a href="#">Forgot password?</a>	<input type="button" value="Sign in"/>	

By signing in, you acknowledge and agree to our [Terms of Use](#) and [Privacy Statement](#).

Need help? Contact [Customer Support](#).

Learn more about how we accelerate the pace of innovation at [Clarivate Analytics](#).



## 2. Register your application

Developers who want to integrate Clarivate APIs need to register their application within the developer portal. This step is required prior to request API access credentials. Applications can be co-owned.

https://developer.clarivate.com/applications

InCites™

Research Analytics -

Google

Web of Science [x.S.]

Endnote Capture

Web of Science [x.S.]

Capturar referencia

Other

ClarivateAnalytics

Home

APIs

Applications

Contact

Content

Rachel Mangano

# Register and View Your Applications

This page displays all your registered applications. It also allows you to register a new application.

An application is the entity to which you attach your API subscriptions. You can own or co-own applications with other developers. Once you have registered an application, you can create and assign APIs that use it. You can assign only one application to an API.

Register a new Application ▾

Help

Application ID:

Application IDs must be all lower case, and may only contain the following characters: a-z, 0-9, -, \_

Application Name:

A human readable description/name of the your application, e.g. "My Awesome Application"

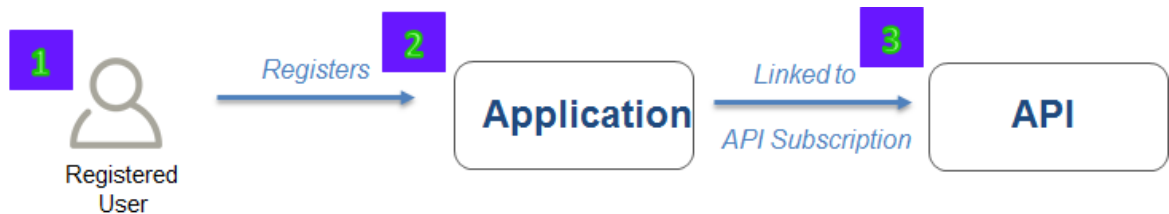
Application Description:

The Application Description field can be used to provide additional details about your application use case, including any relevant URLs. If you are subscribing to an API that requires approvals, completing this field will aid in processing time

☐ This application will use OAuth2.0 Flows (other than the Client Credentials flow; i.e. using redirects)

Register Application

## Relationship between User, Application, and API subscription



- 1 User registers/signs in to developer.clarivate.com with an existing Clarivate email/password account
- 2 User registers the application that will utilize the API (example: "University Portal Citation Matcher App")
- 3 User subscribes/links to API of interest (example: "Web of Science Lite"). Authentication token issued/available once reviewed and approved based on User's institutional contractual entitlement.

### 3. Subscribe to an API

[illegible]

For more information about web services:

- WS LITE Online Help  
<http://ipscience-help.thomsonreuters.com/wosWebServicesLite/WebServicesLiteOverviewGroup/Introduction.html>
- WS EXPANDED Online Help  
<http://ipscience-help.thomsonreuters.com/wosWebServicesExpanded/WebServicesExpandedOverviewGroup/Introduction.html?elqTrackId=a649713d9d1a410297668ee1b83a97ce&elqaid=3746&elqat=2>

## CLARIVATE DATA INTEGRATION SAMPLE DATA

<https://clarivate.com/products/data-integration/sample-data/>

Web Services

- Use Cases
- Sample Data

Use this page to see sample data returned by each of the Web services.

The data associated with each Web service will have that button's color so that you can understand the most useful combination for you.

Considering the scenario where an institution has basic information on a publication, we'll start by searching our Web Services using the title and author. Note that InCites API is only searchable by unique identifier (UT) or institutional identifier.

Press one of the buttons below to include or exclude the data from that source.

WS Lite

Find out more

Premium

Find out more

AMR

Find out more

## WEBSERVICES LITE SAMPLE DATA (BLUE)

Title: Foraging behaviour and habitat use by the European free-tailed bat *Tadarida teniotis*

DOI: 10.3161/001.006.0108

Authors: Marques, JT; Rainho, A [RID: K-5474-2014]; Palmeirim, JM [RID: A-1323-2014]; Carapuco, M [RID: M-5889-2013]; Oliveira, P; Palmeirim, JM

Keywords: *Tadarida teniotis*; Molossidae; foraging; flight-speed; habitat selection; radio-tracking

Journal: ACTA CHIROPTEROLOGICA

Published Year: 2004

Issue: 1

Volume: 6

Pages: 99-110

ISSN: 1508-1109

UT: 000222921800008

Data Integration

Data usage policy

Use Cases

Sample Data

Reset Sample Data

Title: Foraging behaviour and habitat use by the European free-tailed bat *Tadarida teniotis*

DOI: 10.3161/001.006.0108

Authors:

Marques, JT(1) [email: jtsm@uevora.pt]; Rainho, A(2) [RID: K-5474-2014, ORCID: 0000-0001-8826-9458]; Carapuco, M(3) [RID: M-5889-2013, ORCID: 0000-0003-4590-8971]; Oliveira, P(4); Palmeirim, JM(5) [RID: A-1323-2014, ORCID: 0000-0003-4734-8162]

Keywords:

Tadarida teniotis; Molossidae; foraging; flight-speed; habitat selection; radio-tracking

Journal:

ACTA CHIROPTEROLOGICA

Published Year:

2004

Issue:

1

Volume:

6

Pages:

99-110

ISSN:

1508-1109

UT:

000222921800008

Times Cited:

14

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Publisher:

MUSEUM & INST ZOOLOGY PAS-POLISH ACAD SCIENCES

Type:

Journal Article

Language:

English

Subject:

Zoology

Category:

Science and Technology / Life Sciences & Biomedicine

Keywords Plus:

CONSERVATION IMPLICATIONS; NYCTALUS-LEISLERI; PREDATION RISK; SOCIAL CALLS; ECHOLOCATION; CHIROPTERA; STRATEGY; TIME

Abstract:

Autumnal foraging behaviour and habitat use by *Tadarida teniotis* were studied in Southern Portugal, using seventeen radio-marked individuals, followed over multiple nights from fixed and mobile stations. *Tadarida teniotis* proved to be a late emerger, leaving the roost about one hour after sunset and, in contrast to most insectivorous bat species, only had one foraging bout. These bouts were very long, lasting an average of 6 hours and 39 minutes. Bout duration was unrelated to climatic conditions and so probably determined by foraging success. In the early evening almost all bats were foraging, but this activity declined steadily through the night. They kept flying even during fairly cold nights, but did not leave the roost on the coldest nights, in which they probably remained in torpor. As predicted by its body mass and wing morphology, *T. teniotis* was found to be a strong flyer, reaching speeds of over 50 km/h, and flying for up to 10 hours without resting periods. The observed speeds were 2.5 times higher than the predicted maximum range speed, which may be possible due to peculiar adaptations to high-speed flight. On most nights bats flew straight to a previously identified feeding site, but on a few they made slower indirect flights, suggesting a search for profitable foraging areas. Upon arriving to a feeding site most bats remained there for the rest of the foraging trip. The median size of these sites was just over 100 ha. Several tracked bats used the same feeding area simultaneously. The range of the colony had a radius of over 30 km, but most feeding sites were concentrated in a mountainous region located about 5 km north of the roost. The studied bats foraged preferentially over forested areas, particularly pine and cork oak woodlands. They used both alluvial plains and the valleys of a mountainous area, but not its ridges. Our observations support the hypothesis that *T. teniotis* is an opportunistic forager, depending on temporary concentrations of prey, such as insect swarms.

Data Integration

Data usage policy

Use Cases

Sample Data

Title: Foraging behaviour and habitat use by the European free-tailed bat *Tadarida teniotis*

DOI: 10.3161/001.006.0108

Authors:

Marques, JT(1) [email:jtsm@uevora.pt]; Rainho, A(2) [RID: K-5474-2014, ORCID: 0000-0001-8826-9458]; Carapuco, M(3) [RID: M-5889-2013, ORCID: 0000-0003-4590-8971]; Oliveira, P(4); Palmeirim, JM(5) [RID: A-1323-2014, ORCID: 0000-0003-4734-8162]

Keywords:

Tadarida teniotis; Molossidae; foraging; flight-speed; habitat selection; radio-tracking

Journal:

ACTA CHIROPTEROLOGICA

Published Year:

2004

Issue:

1

Volume:

6

Pages:

99-110

ISSN:

1508-1109

UT:

000222921800008

Times Cited:

14

Addresses:

(1)Univ Evora, UMC, P-7000 Evora, Portugal (OE: University of Evora); (2)Inst Conservacao nat, P-1150294 Lisbon, Portugal; (3)Inst Mar, Lab Martimo Guia, P-2750 Cascais, Portugal; (4)Univ Lisbon, Fac Ciencias, Ctr Biol Ambiental, P-1749016 Lisbon, Portugal (OE: Universidade de Lisboa); (5)Univ Lisbon, Fac Ciencias, Dept Biol Anim, P-1749016 Lisbon, Portugal (OE: Universidade de Lisboa)

Publisher:

MUSEUM & INST ZOOLOGY PAS-POLISH ACAD SCIENCES

Type:

Journal Article

Language:

English

Subject:

Zoology

Category:

Science and Technology / Life Sciences & Biomedicine

Keywords Plus:

CONSERVATION IMPLICATIONS; NYCTALUS-LEISLERI; PREDATION RISK; SOCIAL CALLS; ECHOLOCATION; CHIROPTERA; STRATEGY; TIME

Abstract:

Autumnal foraging behaviour and habitat use by *Tadarida teniotis* were studied in Southern Portugal, using seventeen radio-marked individuals, followed over multiple nights from fixed and mobile stations. *Tadarida teniotis* proved to be a late emerger, leaving the roost about one hour after sunset and, in contrast to most insectivorous bat species, only had one foraging bout. These bouts were very long, lasting an average of 6 hours and 39 minutes. Bout duration was unrelated to climatic conditions and so probably determined by foraging success. In the early evening almost all bats were foraging, but this activity declined steadily through the night. They kept flying even during fairly cold nights, but did not leave the roost on the coldest nights, in which they probably remained in torpor. As predicted by its body mass and wing morphology, T *teniotis* was found to be a strong flyer, reaching speeds of over 50 km/h, and flying for up to 10 hours without resting periods. The observed speeds were 2.5 times higher than the predicted maximum range speed, which may be possible due to peculiar adaptations to high-speed flight. On most nights bats flew straight to a previously identified feeding site, but on a few they made slower indirect flights, suggesting a search for profitable foraging areas. Upon arriving to a feeding site most bats remained there for the rest of the foraging trip. The median size of these sites was just over 100 ha. Several tracked bats used the same feeding area simultaneously. The range of the colony had a radius of over 30 kin, but most feeding sites were concentrated in a mountainous region located about 5 kin north of the roost. The studied bats foraged preferentially over forested areas, particularly pine and cork oak woodlands. They used both alluvial plains and the valleys of a mountainous area, but not its ridges. Our observations support the hypothesis that T *teniotis* is an opportunistic forager, depending on temporary concentrations of prey, such as insect swarms.

Times Cited:

24

Source URL (click here)

Related Records URL (click here)

Citing Articles URL (click here)

## INCITES BENCHMARK AND ANALYTICS API (PURPLE)

The screenshot displays a web browser window with the URL <https://clarivate.com/products/data-integration/sample-data/ic-api/>. The page features a sidebar on the left with a 'Data Integration' menu containing 'Data usage policy', 'Use Cases', and 'Sample Data'. The main content area displays a sample data record for a journal article.

**Title:** Foraging behaviour and habitat use by the European free-tailed bat *Tadarida teniotis*  
**DOI:** 10.3161/001.006.0108

**Authors:** Marques, JT(1) [email: [jtsm@uevora.pt](mailto:jtsm@uevora.pt)]; Rainho, A(2) [RID: K-5474-2014, ORCID: 0000-0001-8826-9458]; Carapuco, M(3) [RID: M-5889-2013, ORCID: 0000-0003-4590-8971]; Oliveira, P(4); Palmeirim, JM(5) [RID: A-1323-2014, ORCID: 0000-0003-4734-8162]

**Keywords:** *Tadarida teniotis*; Molossidae; foraging; flight-speed; habitat selection; radio-tracking

**Journal:** ACTA CHIROPTEROLOGICA  
**Published Year:** 2004  
**Issue:** 1  
**Volume:** 6  
**Pages:** 99-110  
**ISSN:** 1508-1109  
**UT:** 000222921800008

**Times Cited:** 14

**Addresses:** (1)Univ Evora, UMC, P-7000 Evora, Portugal (OE: University of Evora); (2)Inst Conservacao nat, P-1150294 Lisbon, Portugal; (3)Inst Mar, Lab Martimo Guia, P-2750 Cascais, Portugal; (4)Univ Lisbon, Fac Ciencias, Ctr Biol Ambiental, P-1749016 Lisbon, Portugal (OE: Universidade de Lisboa); (5)Univ Lisbon, Fac Ciencias, Dept Biol Anim, P-1749016 Lisbon, Portugal (OE: Universidade de Lisboa)

**Publisher:** MUSEUM & INST ZOOLOGY PAS-POLISH ACAD SCIENCES  
**Type:** Journal Article  
**Language:** English  
**Subject:** Zoology  
**Category:** Science and Technology / Life Sciences & Biomedicine  
**Keywords Plus:** CONSERVATION IMPLICATIONS; NYCTALUS-LEISLERI; PREDATION RISK; SOCIAL CALLS; ECHOLOCATION; CHIROPTERA; STRATEGY; TIME

**Abstract:** Autumnal foraging behaviour and habitat use by *Tadarida teniotis* were studied in Southern Portugal, using seventeen radio-marked individuals, followed over multiple nights from fixed and mobile stations. *Tadarida teniotis* proved to be a late emerger, leaving the roost about one hour after sunset and, in contrast to most insectivorous bat species, only had one foraging bout. These bouts were very long, lasting an average of 6 hours and 39 minutes. Bout duration was unrelated to climatic conditions and so probably determined by foraging success. In the early evening almost all bats were foraging, but this activity declined steadily through the night. They kept flying even during fairly cold nights, but did not leave the roost on the coldest nights, in which they probably remained in torpor. As predicted by its body mass and wing morphology, *T. teniotis* was found to be a strong flyer, reaching speeds of over 50 km/h, and flying for up to 10 hours without resting periods. The observed speeds were 2.5 times higher than the predicted maximum range speed, which may be possible due to peculiar adaptations to high-speed flight. On most nights bats flew straight to a previously identified feeding site, but on a few they made slower indirect flights, suggesting a search for profitable foraging areas. Upon arriving to a feeding site most bats remained there for the rest of the foraging trip. The median size of these sites was just over 100 ha. Several tracked bats used the same feeding area simultaneously. The range of the colony had a radius of over 30 km, but most feeding sites were concentrated in a mountainous region located about 5 km north of the roost. The studied bats foraged preferentially over forested areas, particularly pine and cork oak woodlands. They used both alluvial plains and the valleys of a mountainous area, but not its ridges. Our observations support the hypothesis that *T. teniotis* is an opportunistic forager, depending on temporary concentrations of prey, such as insect swarms.

**Times Cited:** 14  
**Source URL** ([click here](#))  
**Related Records URL** ([click here](#))  
**Citing Articles URL** ([click here](#))

**Journal Expected Citations:** 15.916  
**Journal Normalized Citation Impact:** 0.88  
**JIF:** 1.133  
**Category Expected Citation Rate:** 17.4698  
**Percentile:** 41.58  
**Category Normalized Citation Impact:** 0.8  
**ESI Highly Cited Paper:** No  
**ESI Hot Paper:** No  
**International Collaboration:** No  
**Institutional Collaboration:** No  
**Industry Collaboration:** No  
**Open Access:** No

The sidebar on the left includes a 'Data Integration' menu with 'Data usage policy', 'Use Cases', and 'Sample Data'. Below the menu is a 'Reset Sample Data' button.

## CLARIVATE ANALYTICS AND VIVO SERVICES

Clarivate Analytics is an active member, sponsor, and official registered service provider of [VIVO](#).

Vivo is an open-source software used by universities and research organizations around the world as a research portal to their scholarly activities. It provides an integrated view of the scholarly work of an organization to encourage internal and external collaboration among researchers. Clarivate Analytics offers services to help institutions implement VIVO, including setup and configuration, software customization, technical training, and project planning. Clarivate Analytics works directly with clients to plan and execute a VIVO implementation.

<http://info.clarivate.com/vivo-services-and-clarivate-analytics>

## USING CLARIVATE ANALYTICS DATA WITH VIVO

1. Subscribers of the Web of Science database can automatically populate VIVO profiles with metadata for research outputs using Clarivate APIs. The Web of Science Core Collection is a trusted source of records from over 20,000 peer-reviewed journals from around the world and across 250 disciplines in science, social sciences, and arts & humanities. It also contains records for thousands of conferences and books to showcase a range of research outputs in VIVO profiles. The Clarivate APIs also enable you to include a times cited count in VIVO as a measure of research impact for your publications. The Data Citation Index provides records of millions of datasets from trusted data repositories. The API can also be used to integrate these datasets into researcher profiles in VIVO
2. Subscribers to InCites Benchmarking and Analytics product have access to APIs that enable further integration of rich Web of Science Core Collection metadata into VIVO profiles, as well as citation indicators like "highly cited paper" or "industry collaboration"
3. Users of a CRIS system, Converis, can integrate their robust, curated researcher profiles directly into VIVO via API.

## VIVO Services Offered by Clarivate Analytics

- Software installation on client or cloud servers, identifying data sources, planning data ingestion, and selecting supporting tools
- Training on software operation and development
- Consultation and implementation assistance in populating VIVO with rich bibliographic data in an efficient and maintainable way
- Customizable platform and data model to meet local needs



CLARIVATE VIVO DEMO SITE: <https://clarivatevivo.com/>

**Eugene Garfield Institute**

Home People Organizations Research Clinical Trials Capability Map

## Welcome to The Garfield Institute Research Portal

Find people, data, or research...

This is a demo site created by Clarivate Analytics to highlight VIVO services and Web of Science and InCites data integration in VIVO.

For more information, please contact [research.networking@clarivate.com](mailto:research.networking@clarivate.com) or visit our [Data Integration](#) page.

### Hot Papers

- PI-RADS Prostate Imaging - Reporting and Data System: 2015, Version 2, EUROPEAN UROLOGY Dec. 2015
- Diagnosis and Treatment of Primary Adrenal Insufficiency: An Endocrine Society Clinical Practice Guideline, JOURNAL OF CLINICAL ENDOCRINOLOGY & METABOLISM Dec. 2015
- Global, regional, and national incidence and mortality for HIV, tuberculosis, and malaria during 1990-2013: a systematic analysis for the Global Burden of Disease Study 2013, LANCET Dec. 2013
- Second-generation PLINK: rising to the challenge of larger and richer datasets, GIGASCIENCE Dec. 2014
- Comparison of MRI/ultrasound Fusion-Guided Biopsy With Ultrasound-Guided Biopsy for the Diagnosis of Prostate Cancer, JAMA, JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION Dec. 2014
- Nicotinic ACh receptors as therapeutic targets in CNS disorders, TRENDS IN PHARMACOLOGICAL SCIENCES Dec. 2014

### International Collaborations

- Inhibition of Lung Metastasis by Chemokine CCL17-mediated in Vivo Silencing of Genes in CCR4+ Tregs, JOURNAL OF IMMUNOTHERAPY Dec. 2012
- Accelerometer-based measures of active and sedentary behavior in relation to breast cancer risk, BREAST CANCER RESEARCH AND TREATMENT Dec. 2011
- Local delivery of recombinant vaccinia virus encoding for neu counteracts growth of mammary tumors more efficiently than systemic delivery in neu transgenic mice, CANCER IMMUNOLOGY IMMUNOTHERAPY Dec. 2009
- Selective Reactivation of Human Herpesvirus 6 in Patients With Autoimmune Connective Tissue Diseases, JOURNAL OF MEDICAL VIROLOGY Dec. 2012
- Cardiac ryanodine receptors control heart rate and rhythm in adult mice, CARDIOVASCULAR RESEARCH Dec. 2011
- Post-Zygotic and Inter-Individual Structural Genetic Variation in a Presumptive Enhancer Element of the Locus between the IL10R beta and IPNAT1 Genes, PLoS One Dec. 2012

### Industry Collaborations

- Coordinated transcriptional regulation of bone homeostasis by Ebf1 and Zfp521 in both mesenchymal and hematopoietic lineages, JOURNAL OF EXPERIMENTAL MEDICINE Dec. 2012
- Sirt1 ablation promotes stress-induced loss of epigenetic and genomic hematopoietic stem and progenitor cell maintenance, JOURNAL OF EXPERIMENTAL MEDICINE Dec. 2012
- Strengths and limitations of microarray-based phenotype prediction: lessons learned from the IMPROVER Diagnostic Signature Challenge, BIOINFORMATICS Dec. 2012
- An Array-Based Method to Identify Multivalent Inhibitors, JOURNAL OF THE AMERICAN CHEMICAL SOCIETY Dec. 2009
- Diffusion-weighted MRI for detecting and monitoring cancer: a review of current applications in body imaging, Diagnostic and Interventional Radiology Dec. 2011
- Mechanism of Membrane Permeation Induced by Synthetic beta-Hairpin Peptides, BIOPHYSICAL JOURNAL Dec. 2012

### Open Access Publications

- Array-Comparative Genomic Hybridization Reveals Loss of SOCS6 Is Associated with Poor Prognosis in Primary Lung Squamous Cell Carcinoma, PLoS One Dec. 2011
- Experimental Infection of Mice with Avian Paramyxovirus Serotypes 1 to 9, PLoS One Dec. 2010
- RECQL5 cooperates with Topoisomerase II alpha in DNA decatenation and cell cycle progression, NUCLEIC ACIDS RESEARCH Dec. 2011
- Glycosylated phospholipids from Trypanosoma subvert Nitric Oxide Production in Rhodnius prolixus Salivary Glands, PLoS One Dec. 2011
- The lamin protein family, Dec. 2010
- Secretoglobin 3A2 Exhibits Anti-Fibrotic Activity in Bleomycin-Induced Pulmonary Fibrosis Model Mice, PLoS One Dec. 2014

### Scientific Focus Areas

- Biomedical Engineering and Biophysics | Cancer Biology | Cell Biology | Chemical Biology | Chromosome Biology | Clinical Research | Computational Biology | Developmental Biology | Epidemiology | Genetics and Genomics | Health Disparities | Immunology | Microbiology and Infectious Diseases | Molecular Biology and Biochemistry | Molecular Pharmacology | Neuroscience | Social and Behavioral Sciences | Stem Cell Biology | Structural Biology | Systems Biology | Virology

### About The Research Portal

This is a demo site created by Clarivate Analytics to highlight VIVO services and Web of Science and InCites data integration in VIVO.

[Read more about the research portal](#)

### Research

Academic Articles	14,856
Datasets	10
Journals	2,409
Web of Science Research Areas	154

## USING WEB OF SCIENCE DATA

Web of Science™ Core Collection is the gold standard and several primary research organizations are using the data for rankings and reports. Below is reported a short list of references.

## RANKINGS

*“Any ranking is controversial, and no ranking is absolutely objective. Nevertheless, university rankings have become popular in almost all major countries in the world. Whether universities and other stakeholders agree, **ranking systems clearly are here to stay**”.*

Prof. Nian Cai Liu, Shanghai Jiao Tong University

Find below a list of main collaboration with primary ranking producers:

### 1. Annual Ranking of World Universities (Shanghai Ranking).

The Academic Ranking of World Universities (ARWU) was first published in June 2003 by the Center for World-Class Universities (CWCU), Graduate School of Education (formerly the Institute of Higher Education) of Shanghai Jiao Tong University, China, and updated on an annual basis. ARWU uses six objective indicators to rank world universities, including the number of alumni and staff winning Nobel Prizes and Fields Medals, number of highly cited researchers selected by Clarivate Analytics, number of articles published in journals of Nature and Science, number of articles indexed in **Science Citation Index - Expanded** and **Social Sciences Citation Index**, and per capita performance of a university. More than 1200 universities are actually ranked by ARWU every year and the best 500 are published. Since 2009 the Academic Ranking of World Universities (ARWU) has been published and copyrighted by Shanghai Ranking Consultancy. Shanghai Ranking Consultancy is a fully independent organization on higher education information and not legally subordinated to any universities or government agencies

### 2. CWTS Leiden Ranking.

The CWTS Leiden Ranking 2015 offers key insights into the scientific performance of 750 major universities worldwide. A sophisticated set of bibliometric indicators provides statistics on the scientific impact of universities and on universities' involvement in scientific collaboration. **The Leiden Ranking is based exclusively on bibliographic data from the Web of Science database produced by Clarivate Analytics.** The ranking uses data from the Science Citation Index Expanded, the Social Sciences Citation Index, and the Arts & Humanities Citation Index. The Leiden Ranking is based on Web of Science data because **Web of Science offers a good coverage of the international scientific literature and generally provides high quality data.** See more at: <http://www.leidenranking.com/>

CWTS is worldwide recognized as the most important centre for bibliometric studies in the world.

### 3. Reuters Innovation Rankings.

To create our ranking of the world's most innovative universities, Reuters News relied on data compiled by our sister company, Clarivate Analytics Intellectual Property & Science and several of its research platforms: **InCites**, **Web of Science Core Collection**, **Derwent Innovations Index**, **Derwent World Patents Index**, and **Patents Citation Index**.

### 4. US NEWS Best Global Universities.

The overall Best Global Universities rankings encompass the top 750 institutions spread out across 57 countries. The first step in producing these rankings, which are powered by **Clarivate Analytics InCites™** research analytics solutions, involved creating a pool of 1,000 universities that was used to rank the top 750 schools.

The second step was to calculate the rankings using the 12 indicators and weights that U.S. News chose to measure global research performance. Each school's profile page on [usnews.com](https://www.usnews.com/education/best-global-universities) for the top 750 universities lists the overall global score as well as numerical ranks for the 12 indicators, allowing students to compare each school's standing in each indicator. <https://www.usnews.com/education/best-global-universities>

### 5. U-MULTIRANK

U-Multirank is a new multi-dimensional, user-driven approach to international ranking of higher education institutions. The dimensions it includes are teaching and learning, research, knowledge transfer, international orientation and regional engagement. Based on empirical data U-Multirank compares institutions with similar institutional profiles and allows users to develop personalised rankings by selecting performance measures/indicators in terms of their own preferences.

All indicator scores derived from bibliometric analysis are based on information extracted from publications that are indexed in the CWTS-licensed edition of the **Web of Science (WoS) database** (Science Citation Index Expanded, Social Sciences Citation Index, and Arts & Humanities Citation Index).

<https://www.umultirank.org/>

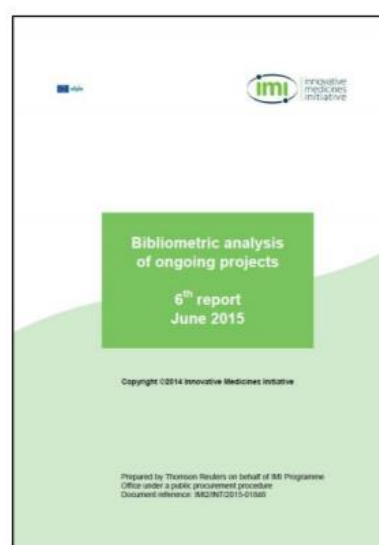
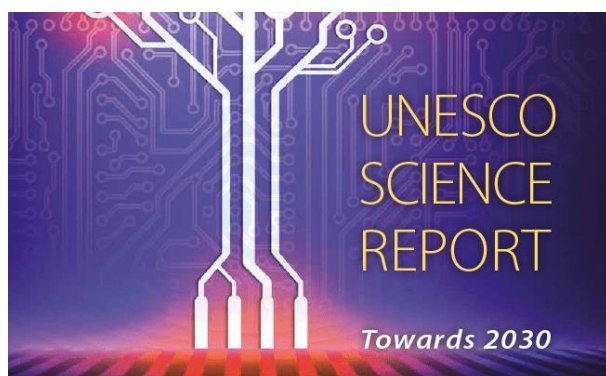
## CUSTOM REPORTS & DATA

Clarivate Analytics has a 50-year history of supplying publication and citation data for research assessment. In such exercises, publication counts represent measures of output while citation counts and relative citation scores represent measures of impact.

In the 1970s, government agencies and funders began to track national research activity using publication, citation and patent indicators and starting to collaborate with Clarivate Analytics. The U.S. National Science Foundation led the way, incorporating WoS data in its first **Science and Engineering Indicators report for 1972**.

See below some very recent examples of such collaborations.

In the 1980s, universities began to monitor their publication output and citation impact, within a national system and compared to one another. Important early studies of this type were conducted in The Netherlands. By the 1990s, researchers began to concede that citation analysis, when performed properly and in conjunction with peer review, could sometimes contribute to research evaluation.



For just as long, Clarivate Analytics has also used publication and citation data to study the structure and dynamics of research activity. Instead of performance, the interest here is the natural organization, growth, changing shape, and interconnections of the entire corpus of scientific publications. See below some covers of recently issued whitepapers and reports:



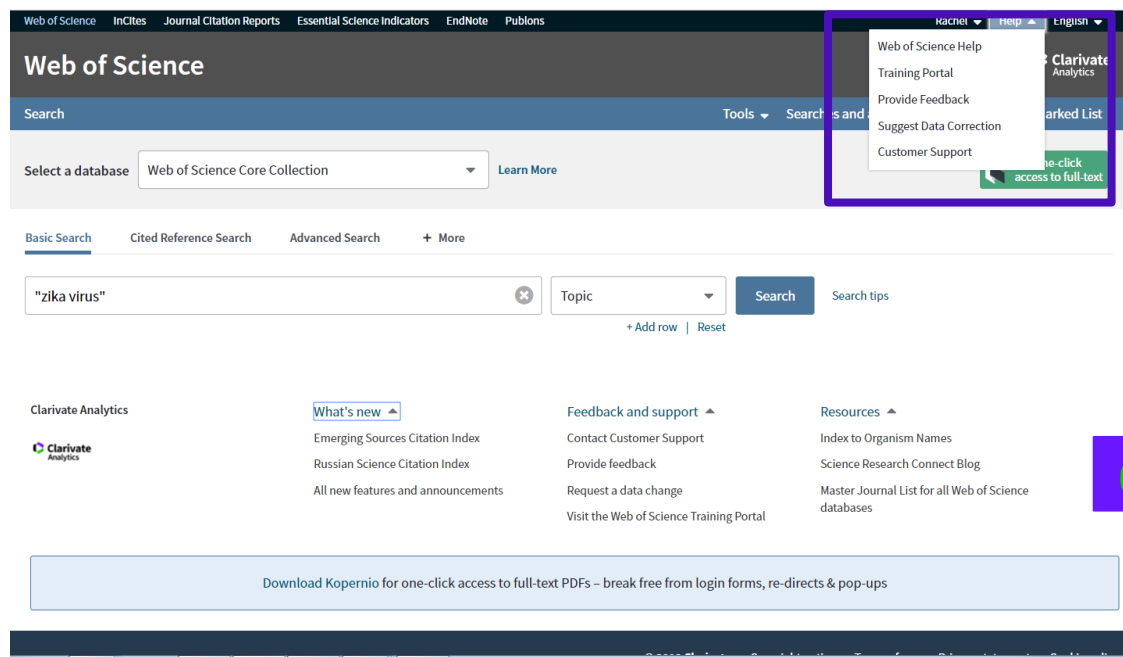
Another important area of collaborations is related to provide national or international agencies and funding bodies with premium access to WoS data, either via pushed delivery or via web services (pull).

See below a list of cases (customer names have been kept generic for security and legal issues):

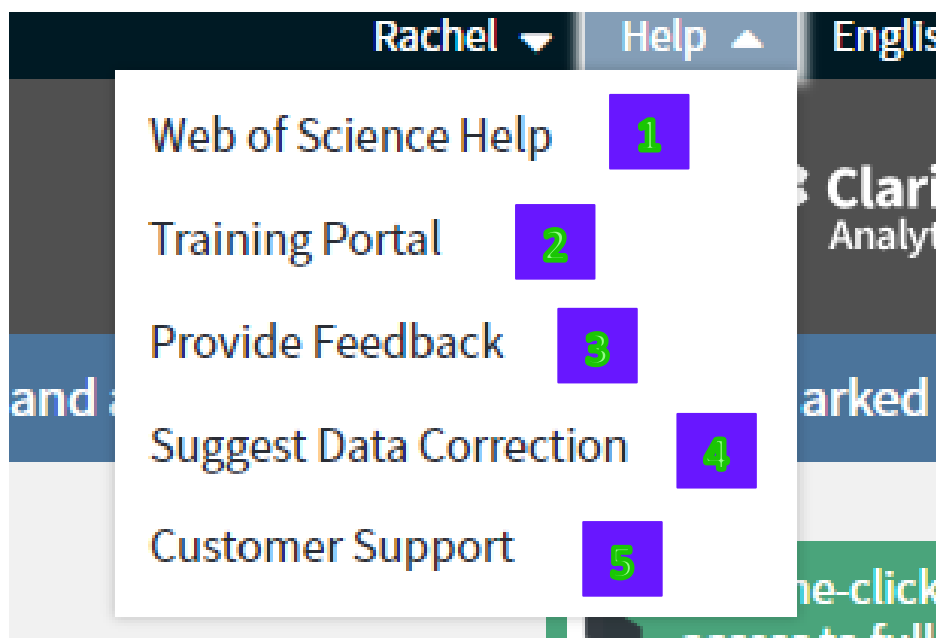
CUSTOMER	PROJECT NEEDS	CUSTOM DATA OFFERING
Middle East Government Agency	Populating a large internal database of scholarly papers for analysis and national author disambiguation efforts	XML backfiles
U.S. Public Health Agency	Supporting agency-wide grant funding, scholarship and research evaluations; populating an analytic database for ad-hoc internal projects	XML SCIE, Pubmed, Core Collection, Biosis, and SSCI backfiles
European Science Agency	Analyzing scholarly publishing and trends in the fields of medicine and biomedical engineering	XML backfiles
U.S. Economic Agency	Analyzing the impact, collaborations, and citations of employee scholarly papers on a yearly basis	Custom yearly citation reports in Access®
APAC Research Organization	Tracking recent national publishing trends and citation data in Web of Science Core Collection	Large custom data extract in Excel®
APAC Technology Agency	Web of Science subscriber, but required additional data support specific to their own institution	Web Services Premium
ANZ Research Policy Institute	Matching papers to Australia/New Zealand authors and performing ad-hoc citation analysis without the burden of creating their own database	Web Services Premium

## USEFUL INFO & LINKS

### SUPPORT & TRAINING (ONLINE LINKS)



From the help file, located on the top right side, there are a series of useful links. The menu presents the following links:





1

This is a link opens the Web of Science Help file which the user can explore using the Contents Page or Index Page. Every database has its own Help file. The help file which opens will correspond to the database selected for the search. For example, if the user is searching in All Databases, the All Databases help file will open.

2

Training Portal: <http://clarivate.libguides.com/home>

3

Provide Feedback:

- Report a citation/Data correction
- Report a missing article/issue
- Submit or recommend a journal
- Product support

<http://ips.clarivate.com/info/wokfeedback/>

4

[https://support.clarivate.com/ScientificandAcademicResearch/s/datachanges?language=en\\_US](https://support.clarivate.com/ScientificandAcademicResearch/s/datachanges?language=en_US)

5

[https://support.clarivate.com/ScientificandAcademicResearch/s/?language=en\\_US](https://support.clarivate.com/ScientificandAcademicResearch/s/?language=en_US)

6

Resources ▲

Index to Organism Names

Science Research Connect Blog

Master Journal List for all Web of Science databases

## WEB OF SCIENCE LINKS

<b>WEB OF SCIENCE CORE COLLECTION</b> <a href="http://clarivate.libguides.com/woscc/basics">http://clarivate.libguides.com/woscc/basics</a>
<b>Librarian Tool Kit</b> <a href="http://clarivate.libguides.com/newlibrarian/home">http://clarivate.libguides.com/newlibrarian/home</a>
<b>Database direct links</b> <a href="http://clarivate.libguides.com/directlinks">http://clarivate.libguides.com/directlinks</a>
<b>Web of Science WELCOME KIT (On-boarding)</b> <a href="http://wokinfo.com/welcomekit/main.html">http://wokinfo.com/welcomekit/main.html</a>
<b>Web of Science QUICK REFERENCE GUIDE</b> <a href="http://clarivate.libguides.com/ld.php?content_id=35888196">http://clarivate.libguides.com/ld.php?content_id=35888196</a>
<b>Web of Science SEARCH BOX (Extension)</b> <a href="https://chrome.google.com/webstore/detail/web-of-science-quick-sear/nemobobcigeaigadamdpegpjkklkoeae">https://chrome.google.com/webstore/detail/web-of-science-quick-sear/nemobobcigeaigadamdpegpjkklkoeae</a>
<b>Web of Science Search Widget</b> <a href="http://clarivate.libguides.com/searchwidgets">http://clarivate.libguides.com/searchwidgets</a>
<b>Web of Science BACKFILES</b> <a href="http://wokinfo.com/products_tools/backfiles/">http://wokinfo.com/products_tools/backfiles/</a>
<b>Web of Science Century of Science BACKFILES</b> <a href="http://wokinfo.com/products_tools/backfiles/cos/">http://wokinfo.com/products_tools/backfiles/cos/</a>
<b>Web of Science Century of Social Science BACKFILES</b> <a href="http://wokinfo.com/products_tools/backfiles/coss/?utm_source=false&amp;utm_medium=false&amp;utm_campaign=false">http://wokinfo.com/products_tools/backfiles/coss/?utm_source=false&amp;utm_medium=false&amp;utm_campaign=false</a>



## LINKS TO OTHER TOOLS

**WEB SERVICES**

<https://clarivate.com/products/data-integration/>

**Clarivate Analytics Libguides**

<http://clarivate.libguides.com/home>

**RESEARCHER ID**

<https://clarivate.com/products/researcherid/>

**Researcher ID – ADMIN (Upload)**

<http://ips.clarivate.com/info/terms-ridul/>

**Researcher ID – Upload (Faq)**

<http://researchanalytics.thomsonreuters.com/solutions/researcherid/rid-ul-faq/>

**Researcher ID ADMIN tool (Help)**

[http://www.researcherid.com/resources/html/help\\_admin.htm](http://www.researcherid.com/resources/html/help_admin.htm)

**ENDNOTE**

<http://endnote.com/>

[http://clarivate.libguides.com/endnote\\_training/home](http://clarivate.libguides.com/endnote_training/home)

**ENDNOTE BASIC (ONLINE VERSION)**

<http://endnote.com/product-details/basic>

**ENDNOTE VERSION COMPARISON**

<http://endnote.com/support/faqs/endnote-compare>

**ENDNOTE ONLINE QUICK REFERENCE GUIDE**

[http://clarivate.libguides.com/ld.php?content\\_id=34785308](http://clarivate.libguides.com/ld.php?content_id=34785308)

**ENDNOTE TRAINING**

[https://clarivate.libcal.com/calendar/endnote\\_training\\_calendar/?cid=7029&t=d&d=0000-00-00&cal=7029](https://clarivate.libcal.com/calendar/endnote_training_calendar/?cid=7029&t=d&d=0000-00-00&cal=7029)

**Kopernio**

<https://kopernio.com>

**DeveloperPortal**

<https://thelens.clarivate.com/groups/clarivate-api-developer-portal/blog/2018/09/08/introducing-the-api-developer-portal>

**EDITORIAL LINKS****SELECTION PROCESS**

<https://clarivate.com/essays/journal-selection-process/>

<https://www.youtube.com/watch?v=WIRbKydivrw>

**EVALUATION (SELECTION) REQUEST**

<http://mjl.clarivate.com/journal-submission/>

**EVALUATION (SELECTION) REQUEST STATUS**

<http://mjl.clarivate.com/journal-evaluation/>

**URL TO WOS RECORDS**

There are two ways to link a WOS record:

- **Static URL:** a link syntax<sup>54</sup> can be provided to be used for single records on WoS. The user would only need to get the UT from the WSP search, then put the UT into the defined link syntax to link to the full record on WoS.
- **AMR API web service:** this web service can automatically generate links to full records, links to citing articles, links to cited references, and links to JCR impact factor. The AMR API Link is designed to be used with Web services (Light or Premium ones), and can be a free add on to a customer WSP/InCites subscription if approved.

In both cases, it's possible to set up a preview version: a free preview version of WoS records for customers/users without a WoS subscription. The account is set up with a "key" to be used in the full record link syntax that allows either full version for customers, or the free version for those working from home and not in the institutional IP range (AMR API link service comes with the free preview "key" for non subscribers for all links except JCR impact factor).

<sup>54</sup> The Links Gateway system provides a REST or URI based interface to Web of Science™, which allows access to various record views in Web of Science™. Depending on the end-user's entitlements, they will either be directed to a subscriber-view of the Web of Science record (Full Record) or to a non-subscriber view of the record (CEL Record).

## THE LENS RESOURCES

A list of all useful content available on the The Lens about Web of Science Core Collection and its main competitor.

- Web of Science Core Collection Value Proposition Video  
<https://thelens.clarivate.com/videos/2555>
- Recording: Conquer the competition: squashing Scopus (also ppt)  
[https://thelens.clarivate.com/groups/ip-science-competitive-insights/blog/2016/02/25/recording-and-powerpoint-conquer-the-competition-squashing-scopus-from-february-19<sup>th</sup>](https://thelens.clarivate.com/groups/ip-science-competitive-insights/blog/2016/02/25/recording-and-powerpoint-conquer-the-competition-squashing-scopus-from-february-19th)
- Web of Science Single Source of Truth  
<https://thelens.clarivate.com/docs/DOC-3487482>
- Open Access on the Web of Science  
<https://clarivate.com/products/web-of-science/open-access>  
<https://thelens.clarivate.com/community/scientific-and-academic-research/web-of-science/blog/2018/10/04/web-of-science-open-access-strategy-messaging-and-competition>
- Web of Science Core Value Differentiators (doc)  
<https://thelens.clarivate.com/docs/DOC-953461>
- Web of Science Platform Weekly Content Updates  
<https://thelens.clarivate.com/docs/DOC-3223070>
- Scopus Compared to Citation Connection  
<https://thelens.clarivate.com/docs/DOC-3501246>
- WoS and Pubmed: complementary resources for Health Science research (ppt)  
<https://thelens.clarivate.com/docs/DOC-1016777>
- Scopus vs. Web of Science CC coverage: Scopus core (doc)  
<https://thelens.clarivate.com/docs/DOC-844157>
- Competitive Knock Out Guide (ppt)  
<https://thelens.clarivate.com/docs/DOC-1014170>
- Scopus\_JST\_presentation (pdf)  
<https://thelens.clarivate.com/docs/DOC-1074564>

- Journal Counts on Scopus Compared to WoS TR/Medline/Scielo/KJD (xls)  
<https://thelens.clarivate.com/docs/DOC-1276020>
- WoS vs Scopus with examples (ppt)  
<https://thelens.clarivate.com/docs/DOC-73285>
- Scopus Presentation (2015\_10\_12) (pdf)  
<https://thelens.clarivate.com/docs/DOC-1070418>
- Scopus Journals compared to WOS all datasets  
<https://thelens.clarivate.com/docs/DOC-3492392>
- External WoS-Scopus comparison (html)  
<https://thelens.clarivate.com/docs/DOC-2895228>
- Scopus Content Compared to Web of Science Platform - August 2017  
<https://thelens.clarivate.com/docs/DOC-3473552>
- Scopus profile (ppt)  
<https://thelens.clarivate.com/docs/DOC-409208>

## APPENDIX A

## TASCA CATEGORIES AND MAPPING WITH EASCA

Code	tASCA	eASCA
BK	Architecture	Arts & Humanities Architecture
BP	Art	Arts & Humanities Art
BQ	Humanities, Multidisciplinary	Arts & Humanities Arts & Humanities - Other Topics
JW	Folklore	Arts & Humanities Arts & Humanities - Other Topics
QK	Medieval & Renaissance Studies	Arts & Humanities Arts & Humanities - Other Topics
OR	Asian Studies	Arts & Humanities Asian Studies
EO	Classics	Arts & Humanities Classics
FS	Dance	Arts & Humanities Dance
JS	Film, Radio, Television	Arts & Humanities Film, Radio & Television
MM	History	Arts & Humanities History
MQ	History & Philosophy of Science	Arts & Humanities History & Philosophy of Science
OX	Literary Theory & Criticism	Arts & Humanities Literature
OZ	Literary Reviews	Arts & Humanities Literature
PA	Literature	Arts & Humanities Literature
PD	Literature, African, Australian, Canadian	Arts & Humanities Literature
PF	Literature, American	Arts & Humanities Literature
PG	Literature, British Isles	Arts & Humanities Literature
PH	Literature, German, Dutch, Scandinavian	Arts & Humanities Literature
QC	Literature, Romance	Arts & Humanities Literature
QD	Literature, Slavic	Arts & Humanities Literature
UT	Poetry	Arts & Humanities Literature
RP	Music	Arts & Humanities Music
UA	Philosophy	Arts & Humanities Philosophy
YI	Religion	Arts & Humanities Religion
YG	Theater	Arts & Humanities Theater
AD	Agriculture, Dairy & Animal Science	Science & Technology Life Sciences & Biomedicine Agriculture
AE	Agricultural Engineering	Science & Technology Life Sciences & Biomedicine Agriculture
AF	Agricultural Economics & Policy	Science & Technology Life Sciences & Biomedicine Agriculture
AH	Agriculture, Multidisciplinary	Science & Technology Life Sciences & Biomedicine Agriculture

<b>AM</b>	Agronomy	Science & Technology Life Sciences & Biomedicine Agriculture
<b>MU</b>	Horticulture	Science & Technology Life Sciences & Biomedicine Agriculture
<b>XE</b>	Soil Science	Science & Technology Life Sciences & Biomedicine Agriculture
<b>AQ</b>	Allergy	Science & Technology Life Sciences & Biomedicine Allergy
<b>AY</b>	Anatomy & Morphology	Science & Technology Life Sciences & Biomedicine Anatomy & Morphology
<b>BA</b>	Anesthesiology	Science & Technology Life Sciences & Biomedicine Anesthesiology
<b>BF</b>	Anthropology	Science & Technology Life Sciences & Biomedicine Anthropology
<b>CL</b>	Audiology & Speech-Language Pathology	Science & Technology Life Sciences & Biomedicine Audiology & Speech-Language Pathology
<b>CN</b>	Behavioral Sciences	Science & Technology Life Sciences & Biomedicine Behavioral Sciences
<b>CO</b>	Biochemical Research Methods	Science & Technology Life Sciences & Biomedicine Biochemistry & Molecular Biology
<b>CQ</b>	Biochemistry & Molecular Biology	Science & Technology Life Sciences & Biomedicine Biochemistry & Molecular Biology
<b>BD</b>	Biodiversity Conservation	Science & Technology Life Sciences & Biomedicine Biodiversity & Conservation
<b>DA</b>	Biophysics	Science & Technology Life Sciences & Biomedicine Biophysics
<b>DB</b>	Biotechnology & Applied Microbiology	Science & Technology Life Sciences & Biomedicine Biotechnology & Applied Microbiology
<b>DQ</b>	Cardiac & Cardiovascular Systems	Science & Technology Life Sciences & Biomedicine Cardiovascular System & Cardiology
<b>ZD</b>	Peripheral Vascular Disease	Science & Technology Life Sciences & Biomedicine Cardiovascular System & Cardiology
<b>CT</b>	Cell & Tissue Engineering	Science & Technology Life Sciences & Biomedicine Cell Biology
<b>DR</b>	Cell Biology	Science & Technology Life Sciences & Biomedicine Cell Biology
<b>FY</b>	Dentistry, Oral Surgery & Medicine	Science & Technology Life Sciences & Biomedicine Dentistry, Oral Surgery & Medicine
<b>GA</b>	Dermatology	Science & Technology Life Sciences & Biomedicine Dermatology
<b>HY</b>	Developmental Biology	Science & Technology Life Sciences & Biomedicine Developmental Biology

<b>FF</b>	Emergency Medicine	Science & Technology  Life Sciences & Biomedicine  Emergency Medicine
<b>AZ</b>	Andrology	Science & Technology  Life Sciences & Biomedicine  Endocrinology & Metabolism
<b>IA</b>	Endocrinology & Metabolism	Science & Technology  Life Sciences & Biomedicine  Endocrinology & Metabolism
<b>IY</b>	Entomology	Science & Technology  Life Sciences & Biomedicine  Entomology
<b>GU</b>	Ecology	Science & Technology  Life Sciences & Biomedicine  Environmental Sciences & Ecology
<b>JA</b>	Environmental Sciences	Science & Technology  Life Sciences & Biomedicine  Environmental Sciences & Ecology
<b>JB</b>	Environmental Studies	Science & Technology  Life Sciences & Biomedicine  Environmental Sciences & Ecology
<b>HT</b>	Evolutionary Biology	Science & Technology  Life Sciences & Biomedicine  Evolutionary Biology
<b>JU</b>	Fisheries	Science & Technology  Life Sciences & Biomedicine  Fisheries
<b>JY</b>	Food Science & Technology	Science & Technology  Life Sciences & Biomedicine  Food Science & Technology
<b>KA</b>	Forestry	Science & Technology  Life Sciences & Biomedicine  Forestry
<b>KI</b>	Gastroenterology & Hepatology	Science & Technology  Life Sciences & Biomedicine  Gastroenterology & Hepatology
<b>DS</b>	Critical Care Medicine	Science & Technology  Life Sciences & Biomedicine  General & Internal Medicine
<b>ML</b>	Primary Health Care	Science & Technology  Life Sciences & Biomedicine  General & Internal Medicine
<b>PY</b>	Medicine, General & Internal	Science & Technology  Life Sciences & Biomedicine  General & Internal Medicine
<b>KM</b>	Genetics & Heredity	Science & Technology  Life Sciences & Biomedicine  Genetics & Heredity
<b>LI</b>	Geriatrics & Gerontology	Science & Technology  Life Sciences & Biomedicine  Geriatrics & Gerontology
<b>LJ</b>	Gerontology	Science & Technology  Life Sciences & Biomedicine  Geriatrics & Gerontology
<b>HL</b>	Health Care Sciences & Services	Science & Technology  Life Sciences & Biomedicine  Health Care Sciences & Services
<b>LQ</b>	Health Policy & Services	Science & Technology  Life Sciences & Biomedicine  Health Care Sciences & Services
<b>MA</b>	Hematology	Science & Technology  Life Sciences & Biomedicine  Hematology

<b>NI</b>	Immunology	Science & Technology Life Sciences & Biomedicine Immunology
<b>NN</b>	Infectious Diseases	Science & Technology Life Sciences & Biomedicine Infectious Diseases
<b>OI</b>	Integrative & Complementary Medicine	Science & Technology Life Sciences & Biomedicine Integrative & Complementary Medicine
<b>OP</b>	Medicine, Legal	Science & Technology Life Sciences & Biomedicine Legal Medicine
<b>CU</b>	Biology	Science & Technology Life Sciences & Biomedicine Life Sciences & Biomedicine - Other Topics
<b>OU</b>	Limnology	Science & Technology Life Sciences & Biomedicine Marine & Freshwater Biology
<b>PI</b>	Marine & Freshwater Biology	Science & Technology Life Sciences & Biomedicine Marine & Freshwater Biology
<b>MC</b>	Mathematical & Computational Biology	Science & Technology Life Sciences & Biomedicine Mathematical & Computational Biology
<b>OO</b>	Medical Ethics	Science & Technology Life Sciences & Biomedicine Medical Ethics
<b>PT</b>	Medical Informatics	Science & Technology Life Sciences & Biomedicine Medical Informatics
<b>PW</b>	Medical Laboratory Technology	Science & Technology Life Sciences & Biomedicine Medical Laboratory Technology
<b>QU</b>	Microbiology	Science & Technology Life Sciences & Biomedicine Microbiology
<b>RQ</b>	Mycology	Science & Technology Life Sciences & Biomedicine Mycology
<b>RT</b>	Clinical Neurology	Science & Technology Life Sciences & Biomedicine Neurosciences & Neurology
<b>RU</b>	Neurosciences	Science & Technology Life Sciences & Biomedicine Neurosciences & Neurology
<b>RX</b>	Neuroimaging	Science & Technology Life Sciences & Biomedicine Neurosciences & Neurology
<b>RZ</b>	Nursing	Science & Technology Life Sciences & Biomedicine Nursing
<b>SA</b>	Nutrition & Dietetics	Science & Technology Life Sciences & Biomedicine Nutrition & Dietetics
<b>SD</b>	Obstetrics & Gynecology	Science & Technology Life Sciences & Biomedicine Obstetrics & Gynecology
<b>DM</b>	Oncology	Science & Technology Life Sciences & Biomedicine Oncology



<b>SU</b>	Ophthalmology	Science & Technology Life Sciences & Biomedicine Ophthalmology
<b>TC</b>	Orthopedics	Science & Technology Life Sciences & Biomedicine Orthopedics
<b>TD</b>	Otorhinolaryngology	Science & Technology Life Sciences & Biomedicine Otorhinolaryngology
<b>TE</b>	Paleontology	Science & Technology Life Sciences & Biomedicine Paleontology
<b>TI</b>	Parasitology	Science & Technology Life Sciences & Biomedicine Parasitology
<b>TM</b>	Pathology	Science & Technology Life Sciences & Biomedicine Pathology
<b>TQ</b>	Pediatrics	Science & Technology Life Sciences & Biomedicine Pediatrics
<b>DX</b>	Chemistry, Medicinal	Science & Technology Life Sciences & Biomedicine Pharmacology & Pharmacy
<b>TU</b>	Pharmacology & Pharmacy	Science & Technology Life Sciences & Biomedicine Pharmacology & Pharmacy
<b>UM</b>	Physiology	Science & Technology Life Sciences & Biomedicine Physiology
<b>DE</b>	Plant Sciences	Science & Technology Life Sciences & Biomedicine Plant Sciences
<b>VE</b>	Psychiatry	Science & Technology Life Sciences & Biomedicine Psychiatry
<b>NE</b>	Public, Environmental & Occupational Health	Science & Technology Life Sciences & Biomedicine Public, Environmental & Occupational Health
<b>VY</b>	Radiology, Nuclear Medicine & Medical Imaging	Science & Technology Life Sciences & Biomedicine Radiology, Nuclear Medicine & Medical Imaging
<b>WC</b>	Rehabilitation	Science & Technology Life Sciences & Biomedicine Rehabilitation
<b>WF</b>	Reproductive Biology	Science & Technology Life Sciences & Biomedicine Reproductive Biology
<b>QA</b>	Medicine, Research & Experimental	Science & Technology Life Sciences & Biomedicine Research & Experimental Medicine
<b>WE</b>	Respiratory System	Science & Technology Life Sciences & Biomedicine Respiratory System
<b>WH</b>	Rheumatology	Science & Technology Life Sciences & Biomedicine Rheumatology
<b>XW</b>	Sport Sciences	Science & Technology Life Sciences & Biomedicine Sport Sciences

<b>GM</b>	Substance Abuse	Science & Technology Life Sciences & Biomedicine Substance Abuse
<b>YA</b>	Surgery	Science & Technology Life Sciences & Biomedicine Surgery
<b>YO</b>	Toxicology	Science & Technology Life Sciences & Biomedicine Toxicology
<b>YP</b>	Transplantation	Science & Technology Life Sciences & Biomedicine Transplantation
<b>YU</b>	Tropical Medicine	Science & Technology Life Sciences & Biomedicine Tropical Medicine
<b>ZA</b>	Urology & Nephrology	Science & Technology Life Sciences & Biomedicine Urology & Nephrology
<b>ZC</b>	Veterinary Sciences	Science & Technology Life Sciences & Biomedicine Veterinary Sciences
<b>ZE</b>	Virology	Science & Technology Life Sciences & Biomedicine Virology
<b>TA</b>	Ornithology	Science & Technology Life Sciences & Biomedicine Zoology
<b>ZM</b>	Zoology	Science & Technology Life Sciences & Biomedicine Zoology
<b>BU</b>	Astronomy & Astrophysics	Science & Technology Physical Sciences Astronomy & Astrophysics
<b>DW</b>	Chemistry, Applied	Science & Technology Physical Sciences Chemistry
<b>DY</b>	Chemistry, Multidisciplinary	Science & Technology Physical Sciences Chemistry
<b>EA</b>	Chemistry, Analytical	Science & Technology Physical Sciences Chemistry
<b>EC</b>	Chemistry, Inorganic & Nuclear	Science & Technology Physical Sciences Chemistry
<b>EE</b>	Chemistry, Organic	Science & Technology Physical Sciences Chemistry
<b>EI</b>	Chemistry, Physical	Science & Technology Physical Sciences Chemistry
<b>FI</b>	Crystallography	Science & Technology Physical Sciences Crystallography
<b>HQ</b>	Electrochemistry	Science & Technology Physical Sciences Electrochemistry
<b>GC</b>	Geochemistry & Geophysics	Science & Technology Physical Sciences Geochemistry & Geophysics
<b>KY</b>	Geology	Science & Technology Physical Sciences Geology
<b>LE</b>	Geosciences, Multidisciplinary	Science & Technology Physical Sciences Geology
<b>PN</b>	Mathematics, Applied	Science & Technology Physical Sciences Mathematics
<b>PO</b>	Mathematics, Interdisciplinary Applications	Science & Technology Physical Sciences Mathematics
<b>PQ</b>	Mathematics	Science & Technology Physical Sciences Mathematics

<b>XY</b>	Statistics & Probability	Science & Technology Physical Sciences Mathematics
<b>QQ</b>	Meteorology & Atmospheric Sciences	Science & Technology Physical Sciences Meteorology & Atmospheric Sciences
<b>RE</b>	Mineralogy	Science & Technology Physical Sciences Mineralogy
<b>ZQ</b>	Mining & Mineral Processing	Science & Technology Physical Sciences Mining & Mineral Processing
<b>SI</b>	Oceanography	Science & Technology Physical Sciences Oceanography
<b>SY</b>	Optics	Science & Technology Physical Sciences Optics
<b>KV</b>	Geography, Physical	Science & Technology Physical Sciences Physical Geography
<b>UB</b>	Physics, Applied	Science & Technology Physical Sciences Physics
<b>UF</b>	Physics, Fluids & Plasmas	Science & Technology Physical Sciences Physics
<b>UH</b>	Physics, Atomic, Molecular & Chemical	Science & Technology Physical Sciences Physics
<b>UI</b>	Physics, Multidisciplinary	Science & Technology Physical Sciences Physics
<b>UK</b>	Physics, Condensed Matter	Science & Technology Physical Sciences Physics
<b>UN</b>	Physics, Nuclear	Science & Technology Physical Sciences Physics
<b>UP</b>	Physics, Particles & Fields	Science & Technology Physical Sciences Physics
<b>UR</b>	Physics, Mathematical	Science & Technology Physical Sciences Physics
<b>UY</b>	Polymer Science	Science & Technology Physical Sciences Polymer Science
<b>DT</b>	Thermodynamics	Science & Technology Physical Sciences Thermodynamics
<b>ZR</b>	Water Resources	Science & Technology Physical Sciences Water Resources
<b>NS</b>	Nanoscience & Nanotechnology	Science & Technology Science & Technology - Other Topics
<b>QL</b>	Logic	Science & Technology Science & Technology - Other Topics
<b>RO</b>	Multidisciplinary Sciences	Science & Technology Science & Technology - Other Topics
<b>AA</b>	Acoustics	Science & Technology Technology Acoustics
<b>AC</b>	Automation & Control Systems	Science & Technology Technology Automation & Control Systems
<b>EP</b>	Computer Science, Artificial Intelligence	Science & Technology Technology Computer Science
<b>ER</b>	Computer Science, Cybernetics	Science & Technology Technology Computer Science
<b>ES</b>	Computer Science, Hardware & Architecture	Science & Technology Technology Computer Science

<b>ET</b>	Computer Science, Information Systems	Science & Technology Technology Computer Science
<b>EV</b>	Computer Science, Interdisciplinary Applications	Science & Technology Technology Computer Science
<b>EW</b>	Computer Science, Software Engineering	Science & Technology Technology Computer Science
<b>EX</b>	Computer Science, Theory & Methods	Science & Technology Technology Computer Science
<b>FA</b>	Construction & Building Technology	Science & Technology Technology Construction & Building Technology
<b>ID</b>	Energy & Fuels	Science & Technology Technology Energy & Fuels
<b>AI</b>	Engineering, Aerospace	Science & Technology Technology Engineering
<b>IF</b>	Engineering, Multidisciplinary	Science & Technology Technology Engineering
<b>IG</b>	Engineering, Biomedical	Science & Technology Technology Engineering
<b>IH</b>	Engineering, Environmental	Science & Technology Technology Engineering
<b>II</b>	Engineering, Chemical	Science & Technology Technology Engineering
<b>IJ</b>	Engineering, Industrial	Science & Technology Technology Engineering
<b>IK</b>	Engineering, Manufacturing	Science & Technology Technology Engineering
<b>IL</b>	Engineering, Marine	Science & Technology Technology Engineering
<b>IM</b>	Engineering, Civil	Science & Technology Technology Engineering
<b>IO</b>	Engineering, Ocean	Science & Technology Technology Engineering
<b>IP</b>	Engineering, Petroleum	Science & Technology Technology Engineering
<b>IQ</b>	Engineering, Electrical & Electronic	Science & Technology Technology Engineering
<b>IU</b>	Engineering, Mechanical	Science & Technology Technology Engineering
<b>IX</b>	Engineering, Geological	Science & Technology Technology Engineering
<b>JI</b>	Ergonomics	Science & Technology Technology Engineering
<b>UE</b>	Imaging Science & Photographic Technology	Science & Technology Technology Imaging Science & Photographic Technology
<b>NU</b>	Information Science & Library Science	Science & Technology Technology Information Science & Library Science
<b>OA</b>	Instruments & Instrumentation	Science & Technology Technology Instruments & Instrumentation
<b>PJ</b>	Materials Science, Paper & Wood	Science & Technology Technology Materials Science
<b>PK</b>	Materials Science, Ceramics	Science & Technology Technology Materials Science
<b>PM</b>	Materials Science, Multidisciplinary	Science & Technology Technology Materials Science
<b>QE</b>	Materials Science, Biomaterials	Science & Technology Technology Materials Science
<b>QF</b>	Materials Science, Characterization & Testing	Science & Technology Technology Materials Science

<b>QG</b>	Materials Science, Coatings & Films	Science & Technology Technology Materials Science
<b>QH</b>	Materials Science, Composites	Science & Technology Technology Materials Science
<b>QJ</b>	Materials Science, Textiles	Science & Technology Technology Materials Science
<b>PU</b>	Mechanics	Science & Technology Technology Mechanics
<b>PZ</b>	Metallurgy & Metallurgical Engineering	Science & Technology Technology Metallurgy & Metallurgical Engineering
<b>RA</b>	Microscopy	Science & Technology Technology Microscopy
<b>RY</b>	Nuclear Science & Technology	Science & Technology Technology Nuclear Science & Technology
<b>PE</b>	Operations Research & Management Science	Science & Technology Technology Operations Research & Management Science
<b>SR</b>	Remote Sensing	Science & Technology Technology Remote Sensing
<b>RB</b>	Robotics	Science & Technology Technology Robotics
<b>XQ</b>	Spectroscopy	Science & Technology Technology Spectroscopy
<b>YE</b>	Telecommunications	Science & Technology Technology Telecommunications
<b>YQ</b>	Transportation	Science & Technology Technology Transportation
<b>YR</b>	Transportation Science & Technology	Science & Technology Technology Transportation
<b>BI</b>	Archaeology	Social Sciences Archaeology
<b>BM</b>	Area Studies	Social Sciences Area Studies
<b>WV</b>	Social Sciences, Biomedical	Social Sciences Biomedical Social Sciences
<b>DI</b>	Business	Social Sciences Business & Economics
<b>DK</b>	Business, Finance	Social Sciences Business & Economics
<b>GY</b>	Economics	Social Sciences Business & Economics
<b>NM</b>	Industrial Relations & Labor	Social Sciences Business & Economics
<b>PC</b>	Management	Social Sciences Business & Economics
<b>EU</b>	Communication	Social Sciences Communication
<b>FE</b>	Criminology & Penology	Social Sciences Criminology & Penology
<b>EN</b>	Cultural Studies	Social Sciences Cultural Studies
<b>FU</b>	Demography	Social Sciences Demography
<b>HA</b>	Education & Educational Research	Social Sciences Education & Educational Research
<b>HB</b>	Education, Scientific Disciplines	Social Sciences Education & Educational Research
<b>HE</b>	Education, Special	Social Sciences Education & Educational Research
<b>JM</b>	Ethnic Studies	Social Sciences Ethnic Studies
<b>JO</b>	Family Studies	Social Sciences Family Studies
<b>KU</b>	Geography	Social Sciences Geography
<b>OM</b>	Law	Social Sciences Government & Law
<b>UU</b>	Political Science	Social Sciences Government & Law

<b>OE</b>	International Relations	Social Sciences International Relations
<b>OT</b>	Linguistics	Social Sciences Linguistics
<b>OY</b>	Language & Linguistics	Social Sciences Linguistics
<b>PS</b>	Social Sciences, Mathematical Methods	Social Sciences Mathematical Methods In Social Sciences
<b>BV</b>	Psychology, Biological	Social Sciences Psychology
<b>EQ</b>	Psychology, Clinical	Social Sciences Psychology
<b>HI</b>	Psychology, Educational	Social Sciences Psychology
<b>MY</b>	Psychology, Developmental	Social Sciences Psychology
<b>NQ</b>	Psychology, Applied	Social Sciences Psychology
<b>VI</b>	Psychology	Social Sciences Psychology
<b>VJ</b>	Psychology, Multidisciplinary	Social Sciences Psychology
<b>VP</b>	Psychology, Psychoanalysis	Social Sciences Psychology
<b>VS</b>	Psychology, Mathematical	Social Sciences Psychology
<b>VX</b>	Psychology, Experimental	Social Sciences Psychology
<b>WQ</b>	Psychology, Social	Social Sciences Psychology
<b>UQ</b>	Planning & Development	Social Sciences Public Administration
<b>VM</b>	Public Administration	Social Sciences Public Administration
<b>WM</b>	Social Issues	Social Sciences Social Issues
<b>HF</b>	Ethics	Social Sciences Social Sciences - Other Topics
<b>MR</b>	History of Social Sciences	Social Sciences Social Sciences - Other Topics
<b>MW</b>	Hospitality, Leisure, Sport & Tourism	Social Sciences Social Sciences - Other Topics
<b>WU</b>	Social Sciences, Interdisciplinary	Social Sciences Social Sciences - Other Topics
<b>WY</b>	Social Work	Social Sciences Social Work
<b>XA</b>	Sociology	Social Sciences Sociology
<b>YY</b>	Urban Studies	Social Sciences Urban Studies
<b>ZK</b>	Women's Studies	Social Sciences Women's Studies

## APPENDIX B

ALPHABETICAL LISTING OF WEB OF SCIENCE CATEGORIES INCLUDING NUMBER OF JOURNALS ACTIVE AND INACTIVE INDEXED FROM 1900-2018<sup>55</sup>

WEB OF SCIENCE CATEGORY	NUMBER OF JOURNALS
ACOUSTICS	60
AGRICULTURAL ECONOMICS & POLICY	46
AGRICULTURAL ENGINEERING	25
AGRICULTURE, DAIRY & ANIMAL SCIENCE	117
AGRICULTURE, MULTIDISCIPLINARY	150
AGRONOMY	239
ALLERGY	51
ANATOMY & MORPHOLOGY	53
ANDROLOGY	10
ANESTHESIOLOGY	78
ANTHROPOLOGY	157
ARCHAEOLOGY	167
ARCHITECTURE	115
AREA STUDIES	159
ART	207
ASIAN STUDIES	91
ASTRONOMY & ASTROPHYSICS	119
AUDIOLOGY & SPEECH-LANGUAGE PATHOLOGY	33
AUTOMATION & CONTROL SYSTEMS	104

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<sup>55</sup> May 2018

<b>BEHAVIORAL SCIENCES</b>	69
<b>BIOCHEMICAL RESEARCH METHODS</b>	107
<b>BIOCHEMISTRY &amp; MOLECULAR BIOLOGY</b>	519
<b>BIODIVERSITY CONSERVATION</b>	61
<b>BIOLOGY</b>	184
<b>BIOPHYSICS</b>	123
<b>BIOTECHNOLOGY &amp; APPLIED MICROBIOLOGY</b>	255
<b>BUSINESS</b>	291
<b>BUSINESS, FINANCE</b>	237
<b>CARDIAC &amp; CARDIOVASCULAR SYSTEMS</b>	249
<b>CELL &amp; TISSUE ENGINEERING</b>	31
<b>CELL BIOLOGY</b>	284
<b>CHEMISTRY, ANALYTICAL</b>	144
<b>CHEMISTRY, APPLIED</b>	111
<b>CHEMISTRY, INORGANIC &amp; NUCLEAR</b>	82
<b>CHEMISTRY, MEDICINAL</b>	81
<b>CHEMISTRY, MULTIDISCIPLINARY</b>	348
<b>CHEMISTRY, ORGANIC</b>	87
<b>CHEMISTRY, PHYSICAL</b>	223
<b>CLASSICS</b>	72
<b>CLINICAL NEUROLOGY</b>	320
<b>COMMUNICATION</b>	204
<b>COMPUTER SCIENCE, ARTIFICIAL INTELLIGENCE</b>	182
<b>COMPUTER SCIENCE, CYBERNETICS</b>	40
<b>COMPUTER SCIENCE, HARDWARE &amp; ARCHITECTURE</b>	85



COMPUTER SCIENCE, INFORMATION SYSTEMS	297
COMPUTER SCIENCE, INTERDISCIPLINARY APPLICATIONS	180
COMPUTER SCIENCE, SOFTWARE ENGINEERING	174
COMPUTER SCIENCE, THEORY & METHODS	173
CONSTRUCTION & BUILDING TECHNOLOGY	104
CRIMINOLOGY & PENOLOGY	107
CRITICAL CARE MEDICINE	49
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## APPENDIX C

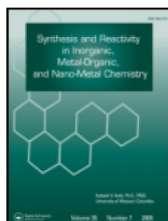
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Type Code	Precedence	Document Type
V	17	TV Review, Radio Review, Video
V	18	TV Review, Radio Review
T	21	Theater Review
Z	22	TEST
9	25	Software Review
Q	28	Script
6	39	Reprint
H	44	Record Review
U	47	Proceedings
1	48	Press Digest
Y	51	Poetry
BP	54	Patent
5	60	News Item
G	62	Music Score Review
S	63	Music Score
J	64	Music Performance Review
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L	79	Letter
I	93	Item About An Individual
8	100	Hardware Review
F	104	Film Review
O	105	Fiction, Creative Prose
X	107	Excerpt TEST
X	108	Excerpt
E	111	Editorial Material
E	112	Editorial
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## APPENDIX D

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**Synthesis and Reactivity in Inorganic, Metal-Organic, and Nano-Metal Chemistry**ISSN: 1553-3174 (Print) 1553-3182 (Online) Journal homepage: <http://www.tandfonline.com/loi/lstr20>**Synthesis and Characterization of Au NPs/  
Molybdophosphoric Acid/CNT Tricomponent  
Nanohybrid****Ali Ahmadpour, Mohammad Reza Afifeh, Seyyed Mojtaba Zebarjad, Ali Ayati  
& Fatemeh F. Bamoharram**

**To cite this article:** Ali Ahmadpour, Mohammad Reza Afifeh, Seyyed Mojtaba Zebarjad, Ali Ayati & Fatemeh F. Bamoharram (2016) Synthesis and Characterization of Au NPs/  
Molybdophosphoric Acid/CNT Tricomponent Nanohybrid, Synthesis and Reactivity in Inorganic,  
Metal-Organic, and Nano-Metal Chemistry, 46:4, 596-601, DOI: [10.1080/15533174.2014.988822](https://doi.org/10.1080/15533174.2014.988822)

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*Synthesis and Reactivity in Inorganic, Metal-Organic, and Nano-Metal Chemistry* (2016) 46, 596–601  
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DOI: 10.1080/15533174.2014.988822



## Synthesis and Characterization of Au NPs/ Molybdophosphoric Acid/CNT Tricomponent Nanohybrid

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In the present study, hybrids of gold nanoparticle-decorated multiwalled carbon nanotubes (CNTs) were synthesized through an effective, green and facile method, using molybdophosphoric acid. This polyoxometalate with exciting properties was used as reducing agent in the synthesis of stabilized gold nanoparticles and also linking them to the CNTs at ambient temperature. The prepared nanohybrids were characterized by TGA, XRD, FTIR, Raman, and TEM techniques. Using this method, a yield of 17% in CNTs decoration with a well distribution of nanoparticles is satisfactorily achieved within 8 h.

**Keywords:** CNT, gold nanoparticles, green, decoration, nanohybrid

### Introduction

Since the discovery of carbon nanotubes (CNTs) by Iijima,<sup>[1]</sup> they have been attracting interests over the past two decades because of their unique electronic, mechanical, physical, and chemical properties.<sup>[2]</sup> They have depicted exciting mechanical resistance, electrical conductivity, high aspect ratio, low density and high specific surface area.<sup>[3,4]</sup>

CNTs can be used as supports for different materials such as metal nanoparticles (NPs). The unprecedented chemical and physical properties of metal NPs<sup>[5–9]</sup> differ markedly from those of the bulk material. So, the combination of the CNTs and these nanoparticles may cause a successful integration of their properties in the new hybrid materials with useful properties for optical electronics, gas sensor, catalysis and electrocatalysis applications.<sup>[10–15]</sup>

There are a large number of reports expressing the decoration of CNTs with metal NPs<sup>[14–18]</sup> and different strategies have been introduced for this purpose.

Most of these methods suffer from some imperfections, such as weak binding of NPs to the CNTs,<sup>[19]</sup> using functional molecules before the reduction to improve the adhesion between NPs and CNTs,<sup>[17]</sup> requirement of high temperatures,<sup>[14]</sup> multistep processes,<sup>[15]</sup> and toxicity of

reducing and stabilizing agents.<sup>[15,20,21]</sup> Polyoxometalates (POMs) as green promising candidates are utilized in fabrication of CNT/NPs systems in order to develop a new eco-friendly method of CNTs decoration.<sup>[22,23]</sup> POMs are transient metal-oxygen clusters, which have unique properties such as strong Brønsted acidity, high hydrolytic stability (pH = 0–12), high thermal stability, noncorrosiveness, and safety.<sup>[24,25]</sup> Their structures remain unchanged under stepwise and multielectron redox reactions and can be reduced by photochemical and electrochemical procedures using suitable reducing agents.<sup>[26]</sup> Hence, several attempts have been carried out to apply POMs for controlling the formation and morphology and also to employ them as protecting ligands for structurally and compositionally diverse nanostructures,<sup>[27]</sup> especially for highly surface-charged metal NPs.<sup>[28–30]</sup> Recently, POMs have been exploited in the process of CNTs decoration. In this regard, Li et al.<sup>[22,23]</sup> and Liu et al.<sup>[31]</sup> employed phosphotungstic acid to synthesize well defined Ag, Au and Pt/POM/CNT as tri-component nanohybrids with enhanced photocatalytic and electrocatalytic activities. This kind of POM has been chemically impregnated into a Pt-supported carbon nanotubes (Pt/CNTs) catalyst, which was prepared via a colloidal method.<sup>[32]</sup> Also, Maiyalagan<sup>[33]</sup> prepared silicotungstic acid stabilized Pt–Ru nanoparticles supported on functionalized carbon nanofibers using a microwave-assisted polyol process.

We have recently made an extensive work on the synthesis of gold NPs using POMs. In our previous works, Preyssler acid,<sup>[34–36]</sup> molybdophosphoric acid,<sup>[37]</sup> and vanadium-substituted mixed addenda ( $H_{3+x}[PMo_{12-x}V_xO_{40}]$ , ( $x = 0–3$ ))<sup>[38]</sup> were introduced as remarkable reducing agents and

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Color versions of one or more figures in this article can be found online at [www.tandfonline.com/lsrt](http://www.tandfonline.com/lsrt).

*Au NPs/Molybdophosphoric Acid/CNT*

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effective stabilizers for the synthesis of gold nanostructures. It has been found that molybdophosphoric acid ( $\text{H}_3[\text{PMO}_{12}\text{O}_{40}]$ ; HPMo) has a high oxidation potential and it is an effective POM in the size controllable synthesis of Au NPs. Although it was used by Jin et al.<sup>[39]</sup> for deposition of Pt-Ru and Pt NPs on the surface of MWCNTs by hydrothermal reduction strategy, it has the potential to be used for the well-defined metal NPs decorated carbon nanotubes and preparation of a new nanohybrid via a simple chemical reduction.

In this assessment, we have investigated the decoration of MWCNTs with gold NPs through a green method without the addition of template or other surface-active agents, based on using POMs in the room temperature. In this regard, for the first time, we introduced HPMo as an efficient reducing agent and a bridging molecule for this aim. Actually, this is a novel type of tricomponent AuNPs/HPMo/CNTs heterostructure with several important advantages. Due to the unique properties of POMs, CNTs, and Au NPs, it is expected that the prepared nanohybrid would show synergic properties. Furthermore, the yield-alterations of CNTs decoration with respect to the process time is also investigated.

### Experimental

The raw MWCNTs were purchased from Nanotech Port Ltd. Co. (Shenzhen, China) and all other chemicals and reagents were obtained from Merck Company. At first, to obtain surface functionalized CNTs (F-CNT), 0.1 g MWCNTs was sonicated in 50 mL nitric acid solution for 2 h. Then, the mixture was centrifuged, filtered and washed with water several times and dried at 90°C for 15 h. For the preparation of Au NPs, solutions of  $\text{HAuCl}_4$  (5 mL,  $10^{-3}$  M),  $\text{H}_3[\text{PMO}_{12}\text{O}_{40}]$  (5 mL,  $5.5 \times 10^{-4}$  M) and propan-2-ol deaerated with  $\text{N}_2$  gas and then mixed under UV irradiation at ambient temperature. Changing the color of solution to pink was an indication of the formation of Au NPs. Subsequently, F-CNTs were added to as prepared colloid of Au NPs, sonicated for 2 h, and mixed for various times (2, 4, 6, and 8 h) in order to be decorated. Finally, the mixture was filtered, washed with 100 mL water and dried at 90°C.

UV/Vis spectra of Au NPs were obtained using Avantes Avaspec-3648 single beam instrument. The decorated CNTs were analyzed by thermogravimetric analysis (TGA) inside a platinum cell with a heating rate of 10°C/min in the air atmosphere. The prepared decorated CNTs with Au NPs were characterized by X-ray diffraction (Bruker D8 Advance) using  $\text{Cu K}\alpha$  radiation in the  $2\theta$  range of 5–85°. For Fourier transform infrared (FTIR) spectroscopy analysis, samples were placed in a KBr pellet and inspected by a Bomem MB-154 spectrophotometer in the range of 400–4000  $\text{cm}^{-1}$ . Also, Raman spectra were recorded by Almega Thermo Nicolet Dispersive Raman spectrometer equipped with an Nd:YLF laser, at a 532 nm wavelength of excitation. Finally, the structure of synthesized hybrids were characterized by transmission electron microscopy (TEM) and electron diffraction (ED) patterns via a Philips CM120 microscope operating at 120 kV.

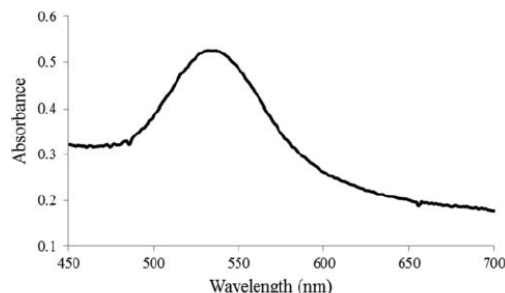


Fig. 1. UV/Vis spectrum of synthesized Au NPs.

### Results and Discussion

In this study, HPMo was chosen for synthesis of Au NPs via a charge transfer between the reduced form of HPMo ( $[\text{PMO}_{12}\text{O}_{40}]^{4-}$ ) and  $\text{Au}^{3+}$  ions in which HPMo acts as reducing and stabilizing agent, and propan-2-ol plays the role of sacrificial agent. Firstly, the synthesized Au NPs were characterized by UV-vis and TEM analysis. The UV-vis spectrum of Au NPs is shown in Figure 1. It is apparent that it has a peak at 532 nm wavelength relating to the prepared Au NPs. Moreover, Figure 2 clearly depicts the TEM image of these NPs with an average size of 10 nm, which are covered with a layer of HPMo and there is no aggregation in Au NPs colloid. It may be due to the adsorption of HPMo polyanions onto the surface of Au NPs which provide both kinetic stabilization through columbic repulsion between the negatively charged particles as well as steric stabilization.<sup>[40]</sup>

The obtained NPs were subsequently employed for decoration of MWCNTs. We have selected four time periods for this process (i.e., 2, 4, 6, and 8 h) and the prepared samples

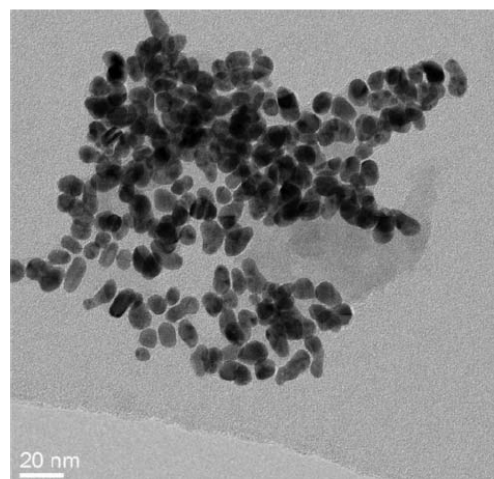


Fig. 2. TEM image of synthesized Au NPs.



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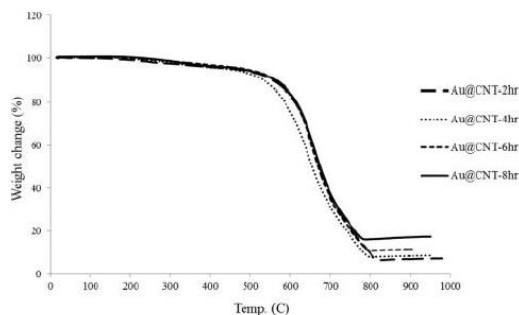


Fig. 3. TGA graphs of decorated samples.

are labeled Au@CNT-2h to Au@CNT-8h, respectively. It is worth to mention that in addition to participating in the formation of stable NPs, the POM coating around NPs can be considered as a fundamental factor in CNT decoration. The reaction between the functional sites of CNTs and this POM coated layer leads to creation of Au-decorated CNTs. In fact, the presence of oxygen atoms in the structure of POMs and carboxyl groups on the surface of CNTs create a strong bond between CNTs and POM-covered NPs. So, POMs plays the role of bridging molecule as well as reducing agent.

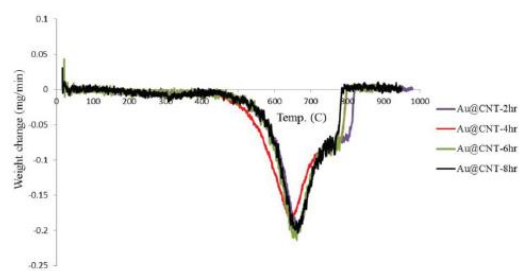


Fig. 4. DTA graphs of decorated samples.

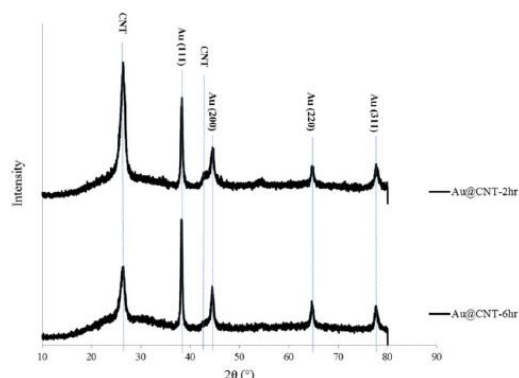


Fig. 5. XRD patterns of two decorated samples at 2 and 6 h.

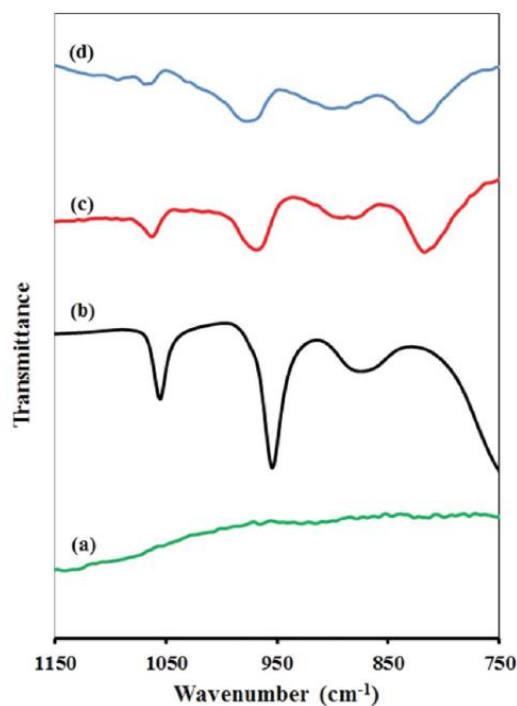


Fig. 6. FTIR spectra of (a) F-CNT, (b) HPMo, (c) HPMo/F-CNT, and (d) Au@HPMo/F-CNT-6 h.

The yields of CNTs decoration were determined by TGA and the results are shown in Figure 3. The obvious descent in the TGA graphs at around 600°C is a sign of weight loss due to the combustion of CNTs. This combustion at 600°C is also compromised by DTA graphs (Figure 4). On the other hand, the remaining mass exhibits the presence of Au NPs. TGA graphs imply that the longer the process time, the more progress in decoration of CNTs is observed and after 8 h, a yield of 17% is achieved. A slight drop in the TGA graphs observed at temperature higher than 250°C is attributed to

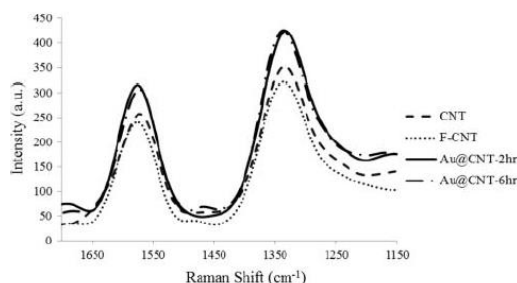


Fig. 7. Raman spectra of two decorated samples as well as CNT and F-CNT.

*Au NPs/Molybdophosphoric Acid/CNT*

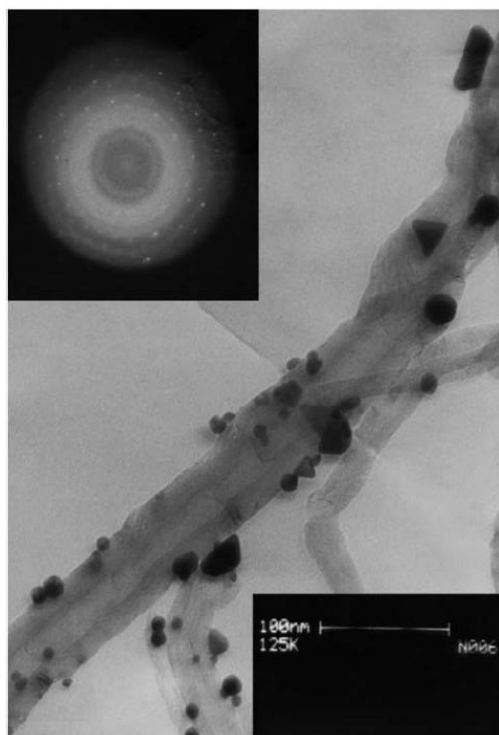
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**Table 1.** D/G ratios for two decorated samples as well as CNT and F-CNT

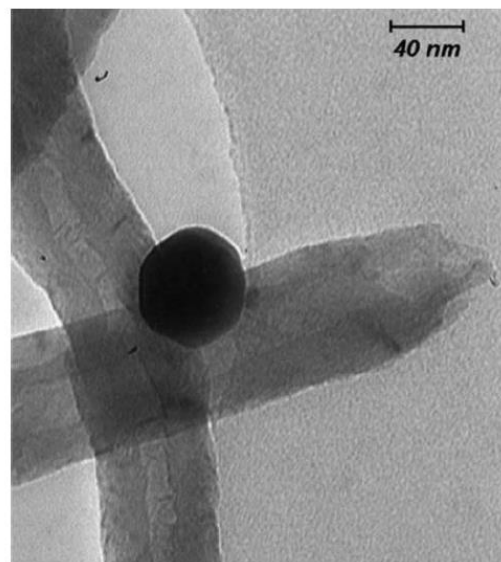
Sample	D/G
CNT	1.37
F-CNT	1.33
Au@CNT-2h	1.34
Au@CNT-6h	1.38

decomposition of CNT functional groups as well as HPMo.<sup>[41,42]</sup>

Figure 5 compares XRD patterns of Au@CNT-2h and Au@CNT-6h. Two sharp peaks at  $2\theta$  of  $26^\circ$  and  $43^\circ$  are assigned to the graphitic structure of CNTs, expressing that the crystallinity of CNTs was kept in the decorating processes.<sup>[14]</sup> On the other hand, other peaks at  $38^\circ$ ,  $44^\circ$ ,  $65^\circ$ , and  $78^\circ$  are the structural characteristics of Au NPs, corresponding to their (111), (200), (220), and (311) planes, respectively. For Au@CNT-6h, the latter four peaks are more intensified compared to those of Au@CNT-2h. Indeed, this confirms the higher yield of decoration for the former as deduced from the TGA results.



**Fig. 8.** TEM image of Au@CNT-8h (the inset: ED pattern of the deposited NPs).



**Fig. 9.** TEM image of the sample prepared with double concentration of  $\text{Au}^{3+}$ .

By employing FTIR spectroscopy, different bonds in the samples can be inspected. Figure 6 shows the FTIR spectra of Au@CNT-6h and HPMo/CNT as well as HPMo, CNT, and F-CNT in the  $750\text{--}1150\text{ cm}^{-1}$  region. There is no peak in the spectrum of CNT and F-CNT, while the spectrum of HPMo consists of three peaks observed at  $885$ ,  $958$ , and  $1058\text{ cm}^{-1}$  corresponding to the absorption bands of  $\nu_{\text{as}}(\text{Mo-O-Mo})$ ,  $\nu_{\text{as}}(\text{Mo-O})$ , and  $\nu_{\text{as}}(\text{P-O})$ , respectively.<sup>[43]</sup> In the Au@CNT-6h and HPMo/CNT spectra, the corresponding peaks appeared near the region of  $830\text{ cm}^{-1}$  for  $\nu_{\text{as}}(\text{Mo-O-Mo})$ ,  $990\text{ cm}^{-1}$  for  $\nu_{\text{as}}(\text{Mo-O})$ , and  $1081\text{ cm}^{-1}$  for  $\nu_{\text{as}}(\text{P-O})$ . It was found that the intensity of these peaks in spectra of Au@CNT-6h and HPMo/CNT decreased as compared with HPMo. This phenomenon has been reported elsewhere.<sup>[44]</sup> This can be due to the interaction between POM and functional groups of CNTs. Furthermore, the band of  $\nu_{\text{as}}(\text{Mo-O-Mo})$  has red-shifted in both Au@CNT-6h and HPMo/CNT spectra. This bathochromic effect is a witness of formation of hydrogen bond between functional groups of CNTs and POM.<sup>[23]</sup>

Moreover, we have checked the relative amount of defects (D-bond) in the graphitic structure (G-bond) of the above four samples by their Raman spectra. The results are shown in Figure 7 and summarized in Table 1. As it can be seen, for all samples two peaks are appeared at around  $1335$  and  $1575\text{ cm}^{-1}$ , corresponding to G-bond and D-bond, respectively. The D and G bond intensity ratios (D/G), which are listed in Table 1, are the criteria for the relative amount of defects in the structure of samples. There are no significant differences between the D/G ratios. Consequently, the decoration process has not changed the structure of CNTs.



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The efficacy of our decoration method is justified by TEM image for the highest time decorated sample (i.e., Au@CNT-8h) and it is shown in Figure 8. This image confirms the successful decoration of F-CNTs with Au NPs obtained after 8 h period. The NPs are obviously found to be well-distributed over the CNTs. Furthermore, NPs of different shapes e.g. triangular, rod and spherical can be recognized in this image. The ED pattern represents the crystalline structure of the deposited NPs on CNTs (the inset of Figure 8). Besides, another sample is also prepared with double concentration of Au<sup>3+</sup> that led to extremely non-uniform decoration of CNTs with larger NPs, as illustrated in Figure 9.

## Conclusions

Applying POMs as green materials in the synthesis of stable gold NPs and subsequent decoration of CNTs with these NPs, result in high yield of decoration with a well distribution of NPs. POMs with their great properties act like a multi-functional system. These materials cover gold NPs and link them to the CNTs at ambient temperature with no need to another contributing agent. The gold NPs-decorated CNTs can be exploited in medicine and food industry as antibacterial agents.

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## APPENDIX E

## LIST OF RESEARCH AREAS (151)

<b>Life Sciences &amp; Biomedicine</b>
<b>Agriculture</b>
<b>Allergy</b>
<b>Anatomy &amp; Morphology</b>
<b>Anesthesiology</b>
<b>Anthropology</b>
<b>Behavioral Sciences</b>
<b>Biochemistry &amp; Molecular Biology</b>
<b>Biodiversity &amp; Conservation</b>
<b>Biophysics</b>
<b>Biotechnology &amp; Applied Microbiology</b>
<b>Cardiovascular System &amp; Cardiology</b>
<b>Cell Biology</b>
<b>Critical Care Medicine</b>
<b>Dentistry, Oral Surgery &amp; Medicine</b>
<b>Dermatology</b>
<b>Developmental Biology</b>
<b>Emergency Medicine</b>
<b>Endocrinology &amp; Metabolism</b>
<b>Entomology</b>
<b>Environmental Sciences &amp; Ecology</b>
<b>Evolutionary Biology</b>
<b>Fisheries</b>
<b>Food Science &amp; Technology</b>
<b>Forestry</b>
<b>Gastroenterology &amp; Hepatology</b>
<b>General &amp; Internal Medicine</b>
<b>Genetics &amp; Heredity</b>
<b>Geriatrics &amp; Gerontology</b>
<b>Health Care Sciences &amp; Services</b>
<b>Hematology</b>
<b>Immunology</b>
<b>Infectious Diseases</b>
<b>Integrative &amp; Complementary Medicine</b>
<b>Legal Medicine</b>
<b>Life Sciences Biomedicine Other Topics</b>
<b>Marine &amp; Freshwater Biology</b>
<b>Mathematical &amp; Computational Biology</b>

Medical Ethics
Medical Informatics
Medical Laboratory Technology
Microbiology
Mycology
Neurosciences & Neurology
Nursing
Nutrition & Dietetics
Obstetrics & Gynecology
Oncology
Ophthalmology
Orthopedics
Otorhinolaryngology
Paleontology
Parasitology
Pathology
Pediatrics
Pharmacology & Pharmacy
Physiology
Plant Sciences
Psychiatry
Public, Environmental & Occupational Health
Radiology, Nuclear Medicine & Medical Imaging
Rehabilitation
Reproductive Biology
Research & Experimental Medicine
Respiratory System
Rheumatology
Sport Sciences
Substance Abuse
Surgery
Toxicology
Transplantation
Tropical Medicine
Urology & Nephrology
Veterinary Sciences
Virology
Zoology
Physical Sciences
Astronomy & Astrophysics
Chemistry
Crystallography

Electrochemistry
Geochemistry & Geophysics
Geology
Mathematics
Meteorology & Atmospheric Sciences
Mineralogy
Mining & Mineral Processing
Oceanography
Optics
Physical Geography
Physics
Polymer Science
Thermodynamics
Water Resources
Technology
Acoustics
Automation & Control Systems
Computer Science
Construction & Building Technology
Energy & Fuels
Engineering
Imaging Science & Photographic Technology
Information Science & Library Science
Instruments & Instrumentation
Materials Science
Mechanics
Metallurgy & Metallurgical Engineering
Microscopy
Nuclear Science & Technology
Operations Research & Management Science
Remote Sensing
Robotics
Science & Technology Other Topics
Spectroscopy
Telecommunications
Transportation
Arts & Humanities
Architecture
Art
Arts & Humanities Other Topics
Asian Studies
Classics

Dance
Film, Radio & Television
History
History & Philosophy of Science
Literature
Music
Philosophy
Religion
Theater
Social Sciences
Archaeology
Area Studies
Biomedical Social Sciences
Business & Economics
Communication
Criminology & Penology
Cultural Studies
Demography
Education & Educational Research
Ethnic Studies
Family Studies
Geography
Government & Law
International Relations
Linguistics
Mathematical Methods In Social Sciences
Psychology
Public Administration
Social Issues
Social Sciences Other Topics
Social Work
Sociology
Urban Studies
Women's Studies

## APPENDIX F

## BASIC PROCEDURE FOR UNIFICATION

Institutions willing to collaborate with Clarivate Analytics may request the excel file with all details of the current set of variances and rules (see table below) at the webpage:

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- Check the preferred name in usage is the right one.
- Review, validate and/or modify variances and rules

INSTITUTION NAME VARIANTS	SEGMENT 1 - LOCATION CITY/STATE	SEG2 - LOCATION CITY/STATE	LOCATION COUNTRY	REVIEW/ ADD/DELETE
<i>sample content</i>				
<i>National Institute of Plasma Radiation</i>	<i>Physics Accelerator La, 409 Atom Street, Margurele</i>	<i>Bucharest</i>	<i>Romania</i>	<i>Review</i>
<i>ABC University - Mexico</i>		<i>Mexico City</i>	<i>Mexico</i>	<i>Delete</i>
<i>Case Western Reserve University</i>	<i>Dept Med, Div Pulm</i>	<i>Navarra</i>	<i>Spain</i>	<i>Add</i>
<i>Autonomous University of Madrid</i>	<i>Fac PSICOL, Dept PSICOL Social Methodology</i>	<i>Scrnton, Ohio</i>	<i>United States</i>	<i>Add</i>
INSTITUTION NAME VARIANTS	SEGMENT 1 - LOCATION CITY/STATE	SEG 2 - LOCATION CITY/STATE	LOCATION COUNTRY	REVIEW/ ADD/DELETE

Below some details for reviewing the file:

Column A	Add institution name/address variants and affiliates for Review, Add, or Delete.
Column B	Provide a city/state (or region, province, etc.) where the organization name/address variant is located
Column C	Provide a second city/state (or region, province, etc.) where the organization name/address variant is located (if necessary)
Column D	Provide a country where the organization name/address variant is located.
Column E	Enter Review, Add, or Delete as an instruction for how to handle the name/address variant



<b>Review</b>	Addresses in use will be inspected looking for the provided name/address variant to ensure that all are found and attributed to the institution
<b>Add</b>	Name/Address variant will be added to the organization record so that future publications showing the name/address variant will be attributed to the organization
<b>Delete</b>	Name/Address variant will be deleted from the organization record, changing how papers are attributed by removing variants that do not belong to the institution

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In the support form field labeled "Product," please select InCites™ or Web of Science®.

In the support form field labeled "Type of Change," please select "Institution".

For any irrelevant required fields, please enter "N/A".

Unification addition/update work will be scheduled and then will be completed as soon as possible.

Completed work will be reflected in the next scheduled product/service update.

Questions about this process may be directed to:

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