PROPIEDAD INTELECTUAL Y CIENCIA

Evaluación de Revistas Mexicanas de Alto Impacto

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2016

THOMSON REUTERS™

AGENDA

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03 Journals Evaluation Process

04 Metodology & Data

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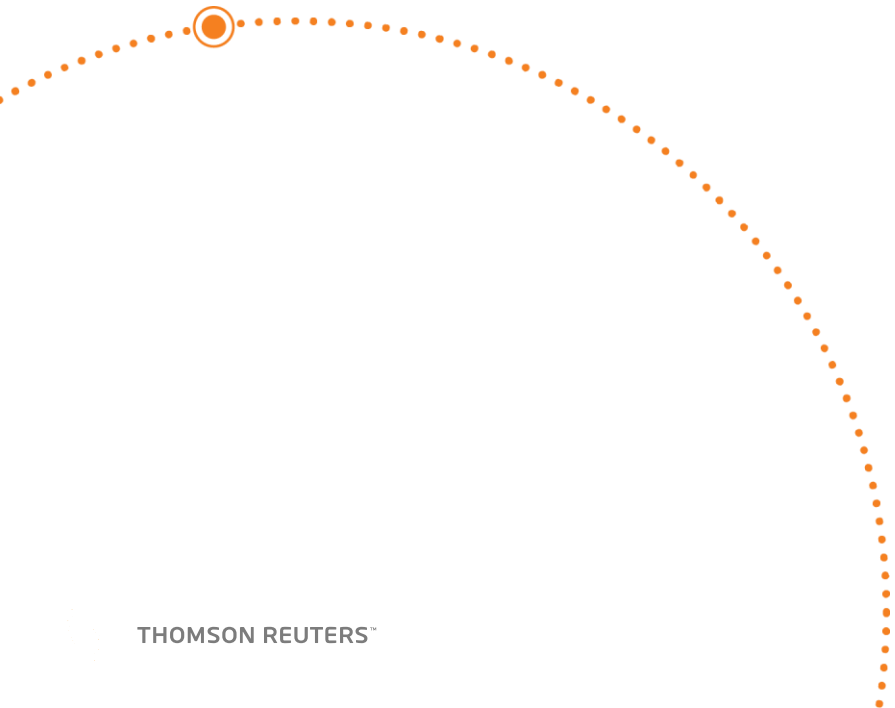


OBJETIVE: Identify and evaluate the Most Influential Mexican Journals

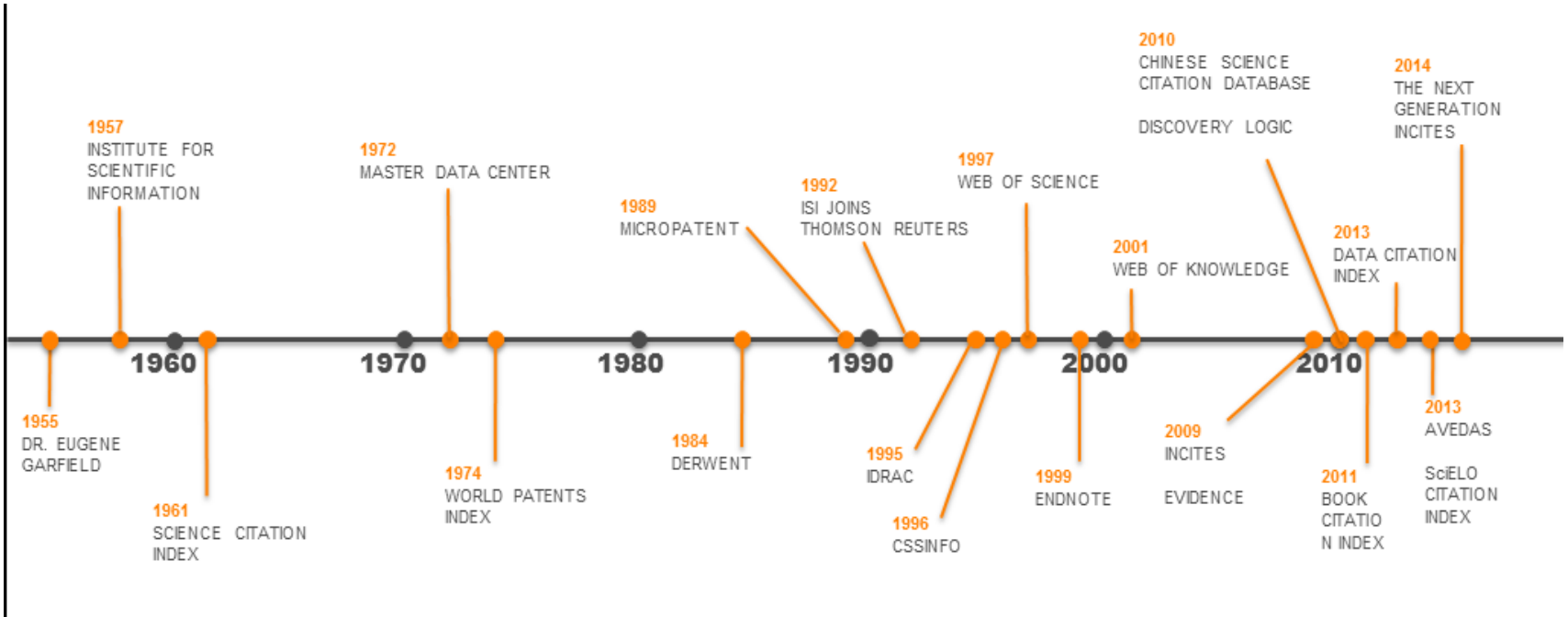
How does one determine the most trustworthy and proven sources of information?

How can young researchers seeking to make their mark on the world best decide where to publish? How can researchers be certain that their work will achieve the highest possible visibility and influence?

For the last four decades, the Intellectual Property & Science has offered an answer – the Journal Citation Reports® (JCR), a compendium of metrics for gauging the influence of scientific and scholarly journals.

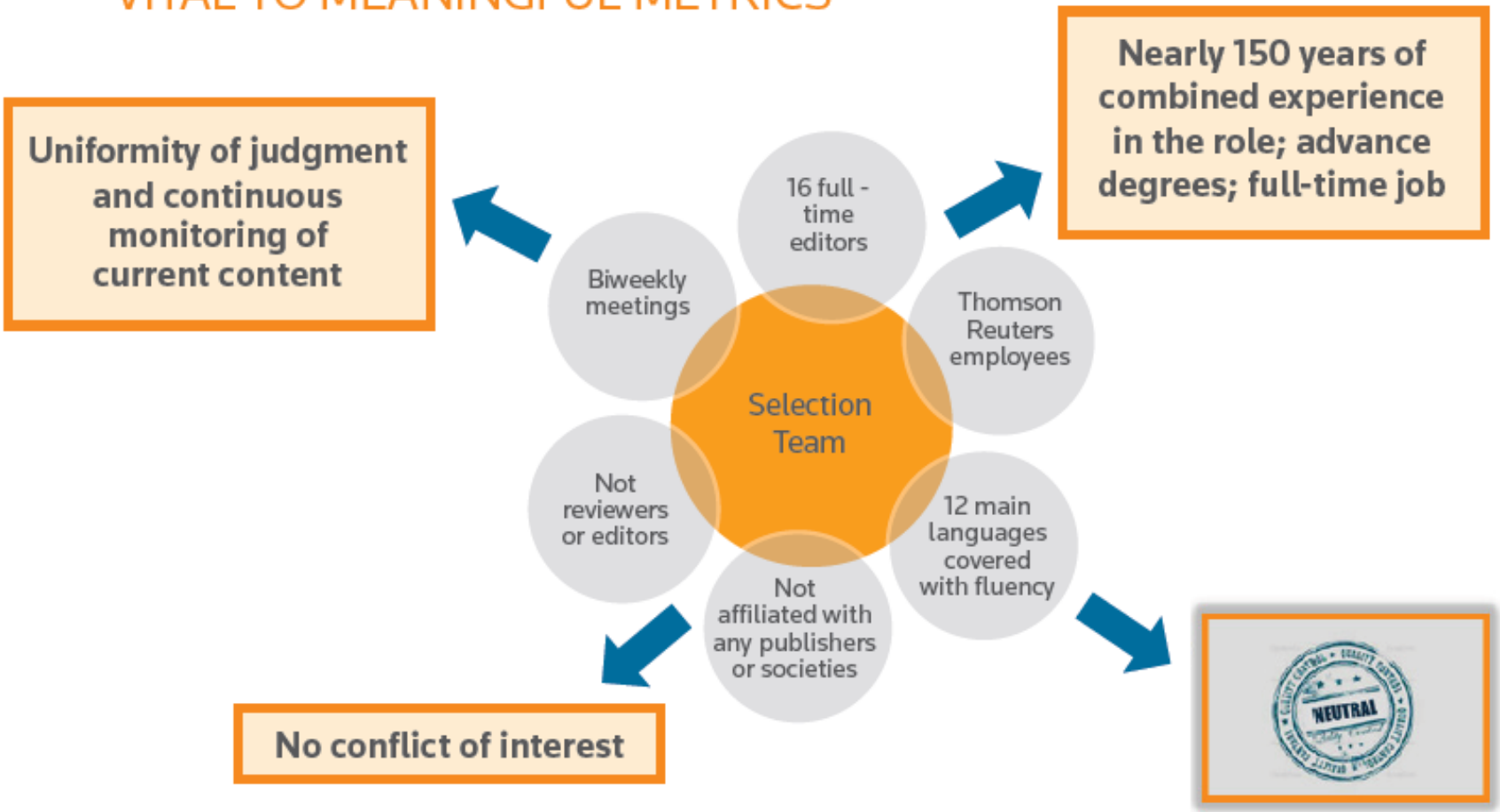
History of the JCR?

In 1964, Dr. Eugene Garfield created the Science Citation Index® (SCI), which is now one of the indices that form the backbone of Thomson Reuters Web of Science™. The first JCR was published in 1975 as a part of the SCI. In 1990, JCR debuted as a stand-alone product on microfiche. And in 1997, JCR on the Web was born, creating the most comprehensive collection of profiles and metrics supporting deep evaluation of journal attributes and performance. In each year's JCR release, more than 11,000 journals in more than 230 categories are represented.



Evaluation for Web of Science
A manual, masterful process

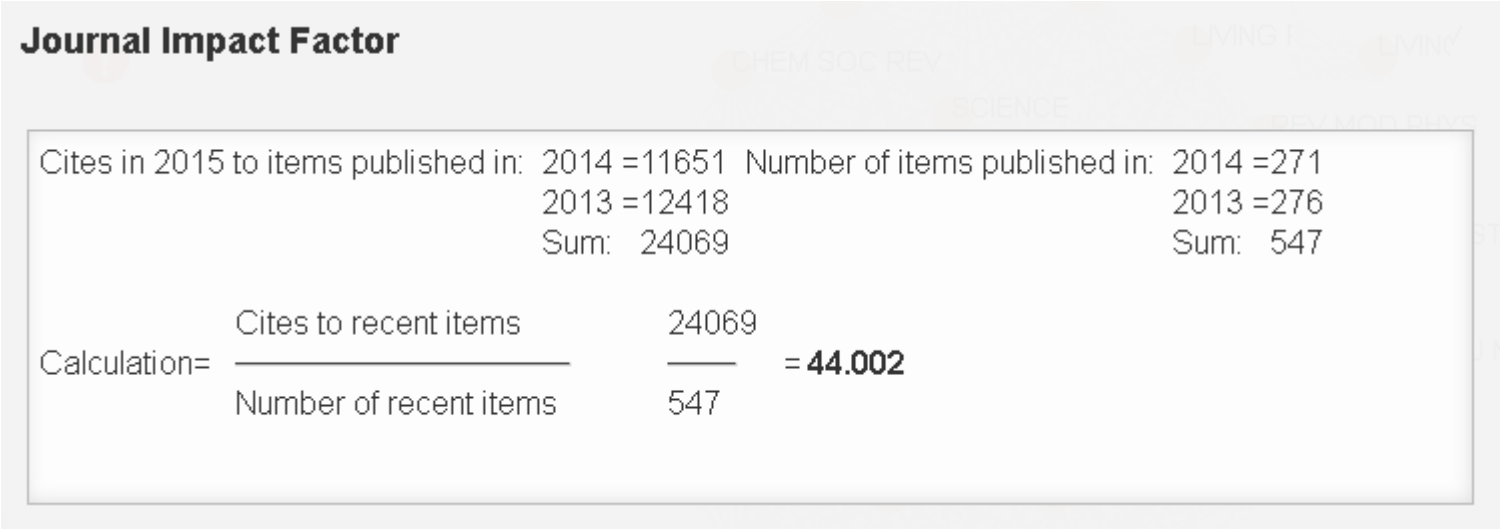
WEB OF SCIENCE SELECTION PROCESS – VITAL TO MEANINGFUL METRICS



Journal Impact Factor (JIF)

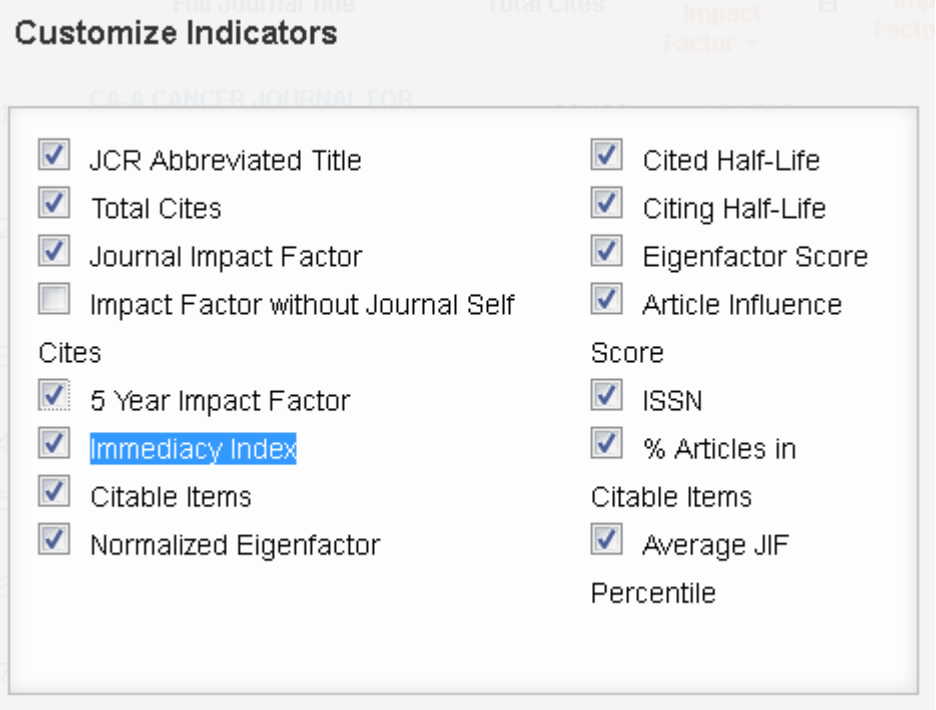
One of the JCR's best-known metrics, the Journal Impact Factor (JIF), is also one of the **most controversial** metrics in the community. The initial goal of the JCR was to assist librarians and administrators in cultivating library collections. Since then, JCR, and especially the JIF, have taken on a life of their own, beyond the control of Thomson Reuters. Journal publishers, understandably, have been keenly interested in the Impact Factors of their respective titles, often featuring the metric in their advertising. Critics argue that the JIF has gained undue prominence and emphasis as a measurement, and even, in some cases, as a driver of editorial content in pursuit of a higher score.

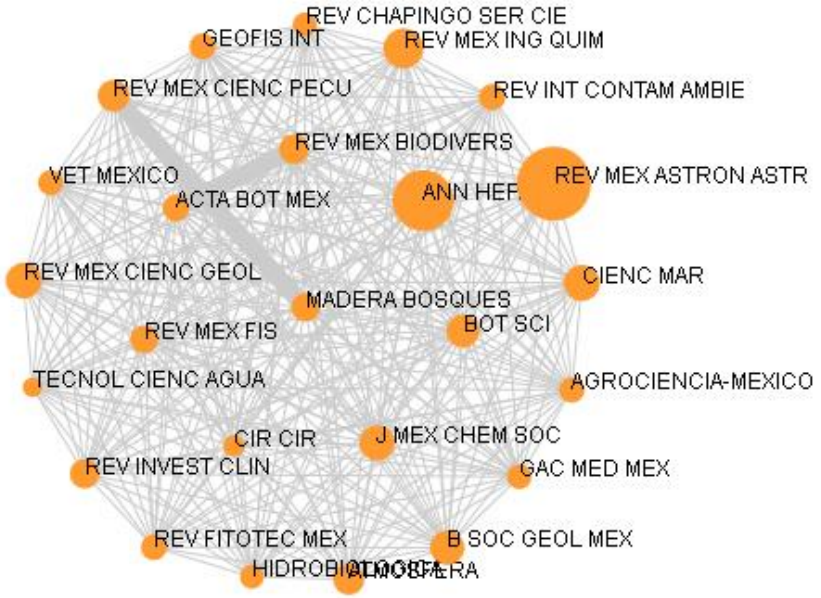
When **used properly**, however, the JIF and the other metrics within JCR can provide a solid picture of a journal's performance and place among its peers.



Beyond Impact Factor

While the formula for calculating the Impact Factor is simple and transparent and gets most of the research community's attention, the Journal Citation Reports includes **more than one metric**. We offer short-, medium-, and long-term analysis of journal performance in the JCR. We have the Immediacy Index, the Five-year Impact Factor, and the Citing and Cited Half-lives. We have the Eigenfactor, which uses citation weighting based on the source of the citation. We also offer subject-level normalizations for all of these metrics.





Metodology & Data for this study

Using the JCR universe we identified those Mexican journals with a positive trend in the past 5 years. We combined 7 metrics to rank the journals in order to recognize the leading journals versus pairs and versus other categories

- JCR Universe (+11,900 journals)
- Impact Factor (**including trends**)
- 5-YEAR Impact Factor
- Normalized Eigenfactor
- Journal Normalized Citation Impact
- Average JIF Percentile
- % Documents Cited 5-Years
- International Collaborations

InCites™ Journal Citation Reports®

5-YEAR Journal Impact Factor (JIF)

Same formula for calculating the traditional Impact Factor with a larger time screen

5-Year Journal Impact Factor

Cites in 2015 to items published in:		Number of items published in:	
	2014 =0		2014 =0
	2013 =2		2013 =14
	2012 =2		2012 =12
	2011 =2		2011 =12
	2010 =0		2010 =11
	Sum: 6		Sum: 49

$$\text{Calculation: } \frac{\text{Cites to recent items}}{\text{Number of recent items}} = \frac{6}{49} = \mathbf{0.122}$$

EIGENFACTOR Metrics

Like the Impact Factor, the **Eigenfactor** Score and Article Influence® Score use citation data to assess and track the influence of a journal in relation to other journals. **Eigenfactor** Metrics are available only for JCR years 2007 and later.

Eigenfactor Score

The Eigenfactor Score calculation is based on the **number of times** articles from the journal published in the **past five years have been cited** in the JCR year, but it also considers which journals have contributed these citations so that highly cited journals will influence the network more than lesser cited journals. References from one article in a journal to another article from the same journal are removed, so that Eigenfactor Scores are not influenced by journal self-citation.

EIGENFACTOR.org

Source: www.eigenfactor.org

JOURNAL IMPACT FACTOR PERCENTILE

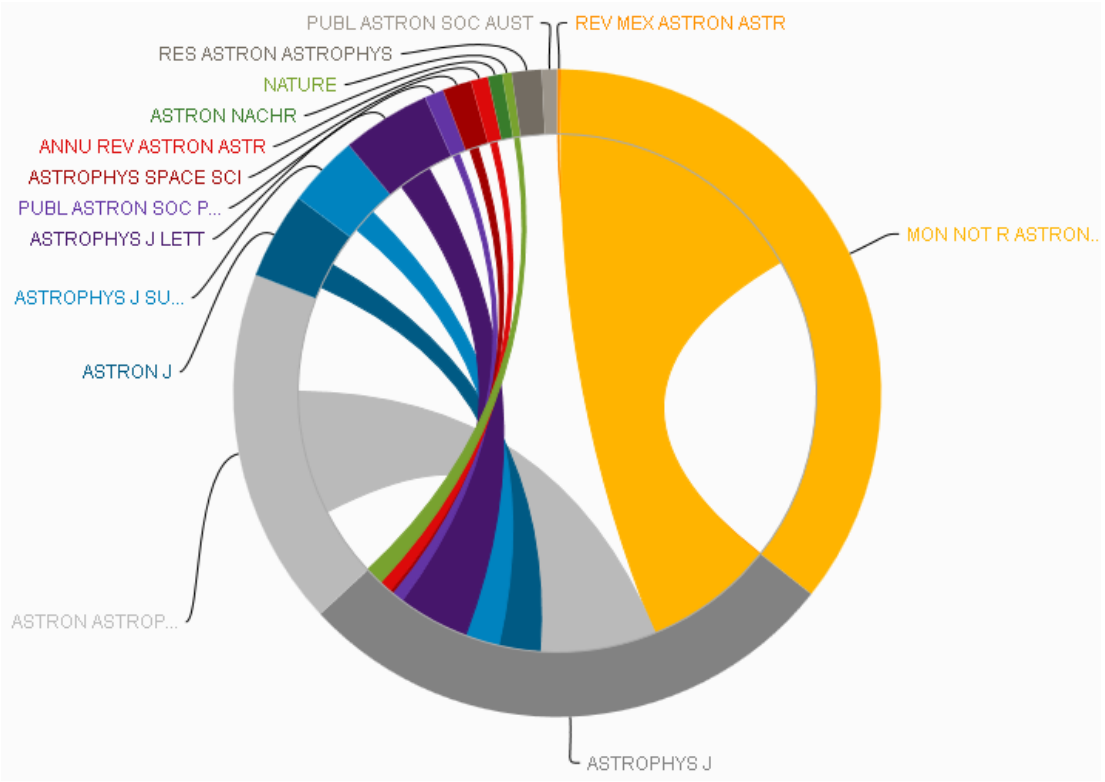
The Journal Impact Factor Percentile is a **brand-new, innovative journal metric** that enables meaningful comparison of journals in different categories. With a normalized metric, one can compare journals among the many subdisciplines in Engineering, for example. Dr. Garfield himself has supported the creation of this type of metric*. Together with Dr. Garfield and Dr. Pudovkin, our analysts developed the Journal Impact Factor (JIF) Percentile, which takes the original concept of a normalized Impact Factor and presents it as a percentile.

The JIF Percentile is the percentile of a journal's Impact Factor in relation to that of other journals in the same category. It is measured on a scale of 0 to 100, where the higher the value, the higher the Impact Factor of the journal in relation to its peers. JIF Percentile allows for comparison of journals across **different categories** by providing a normalized score based on the rank of the JIF.

JOURNAL IMPACT FACTOR PERCENTILE

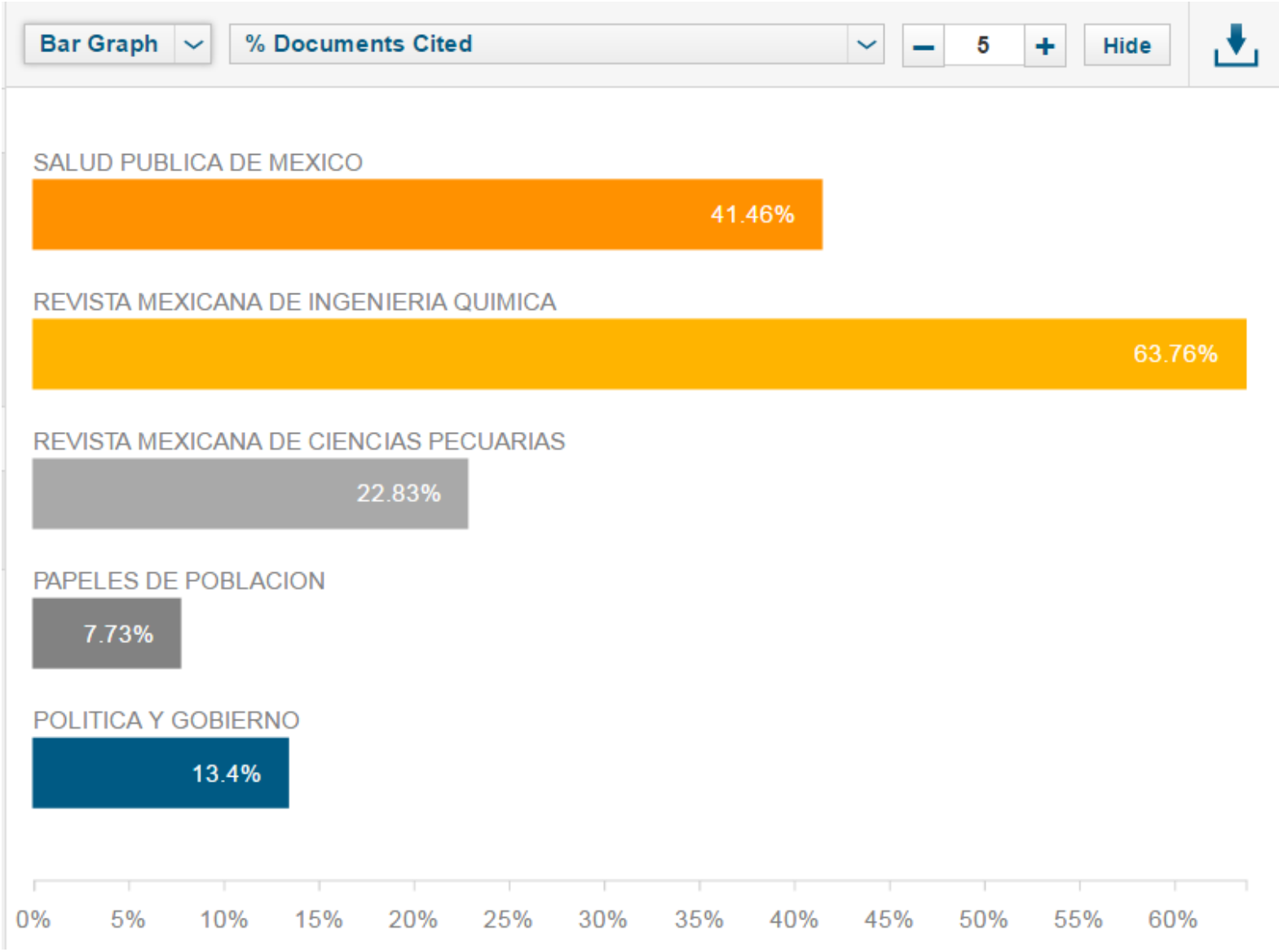
It is calculated as (n – r + .5)/n where n = the number of journals in the category and r = the descending rank of the particular journal within that category. Within the interface, the JIF Percentile can be found on the Rank table, along with the Rank in Category and Quartile information

(n – r + .5)/n



% Cited Documents

It talks about the impact of the journals as a “set” not only high impact articles



FIRST SELECTION

TOP MEXICAN JOURNALS – Science Edition

TITULO	ISSN	JIF 2014	JIF 2015	RANK 2014	RANK 2015	Quart 2014	Quart 2015	Average Journal Impact Factor Percentile
Revista Mexicana de Ciencias Pecuarias	2007-1124	0.4	0.58	47/57	37/58	Q4	Q3	37.069
Salud Publica de Mexico	0036-3634	0.80	1.11	113/147	104/153	Q4	Q3	32.353
Revista Mexicana de Ingenieria Quimica	1665-2738	0.57	0.92	59/72	50/71	Q4	Q3	31.993
Boletin de la Sociedad Geologica Mexicana	1405-3322	0.432	0.68	40/46	35/47	Q4	Q3	26.596
Botanical Sciences	2007-4298	0.526	0.62	171/204	163/209	Q4	Q4	22.249
CIENCIAS MARINAS	0185-3880	0.68	0.75	86/103	82/103	Q4	Q4	20.874
Revista Mexicana de Biodiversidad	1870-3453	0.459	0.49	35/44	39/48	Q4	Q4	19.792
Journal of the Mexican Chemical Society	1870-249X	0.62	0.72	131/157	132/163	Q4	Q4	19.325
Madera y Bosques	1405-0471	0.29	0.43	59/65	54/66	Q4	Q4	18.939
AGROCIENCIA	1405-3195	0.262	0.31	46/56	48/57	Q4	Q4	16.667
REVISTA MEXICANA DE CIENCIAS GEOLOGICAS	1026-8774	0.57	0.74	164/175	158/184	Q4	Q4	14.402
REVISTA MEXICANA DE FISICA	0035-001X	0.339	0.41	74/78	73/79	Q4	Q4	8.228
Revista Chapingo Serie Ciencias Forestales y del Ambiente	0186-3231	0.111	0.24	65/65	62/66	Q4	Q4	6.818
Convergencia-Revista de Ciencias Sociales	1405-1435	0.019	0.13	142/142	134/142	Q4	Q4	5.986
Revista Internacional de Contaminacion Ambiental	0188-4999	0.177	0.34	222/223	220/225	Q4	Q4	2.444
Hidrobiologica	0188-8897	0.185	0.23	101/103	101/103	Q4	Q4	2.427

This list includes those journals with positive changes regarding past 5 years.

Average JIF Percentile allow us to compare journals in different subject areas

FIRST SELECTION

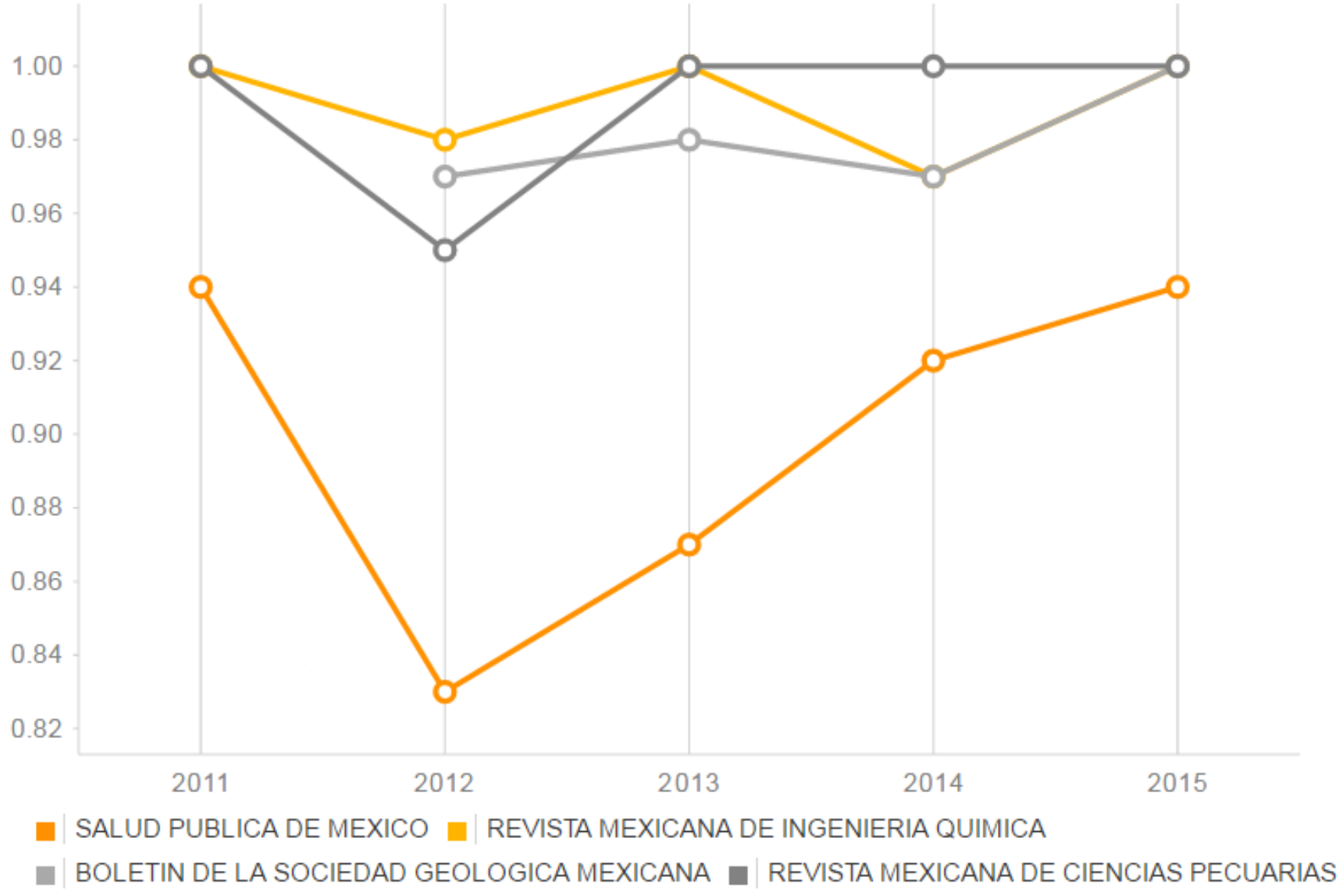
TOP MEXICAN JOURNALS – Social Science Edition

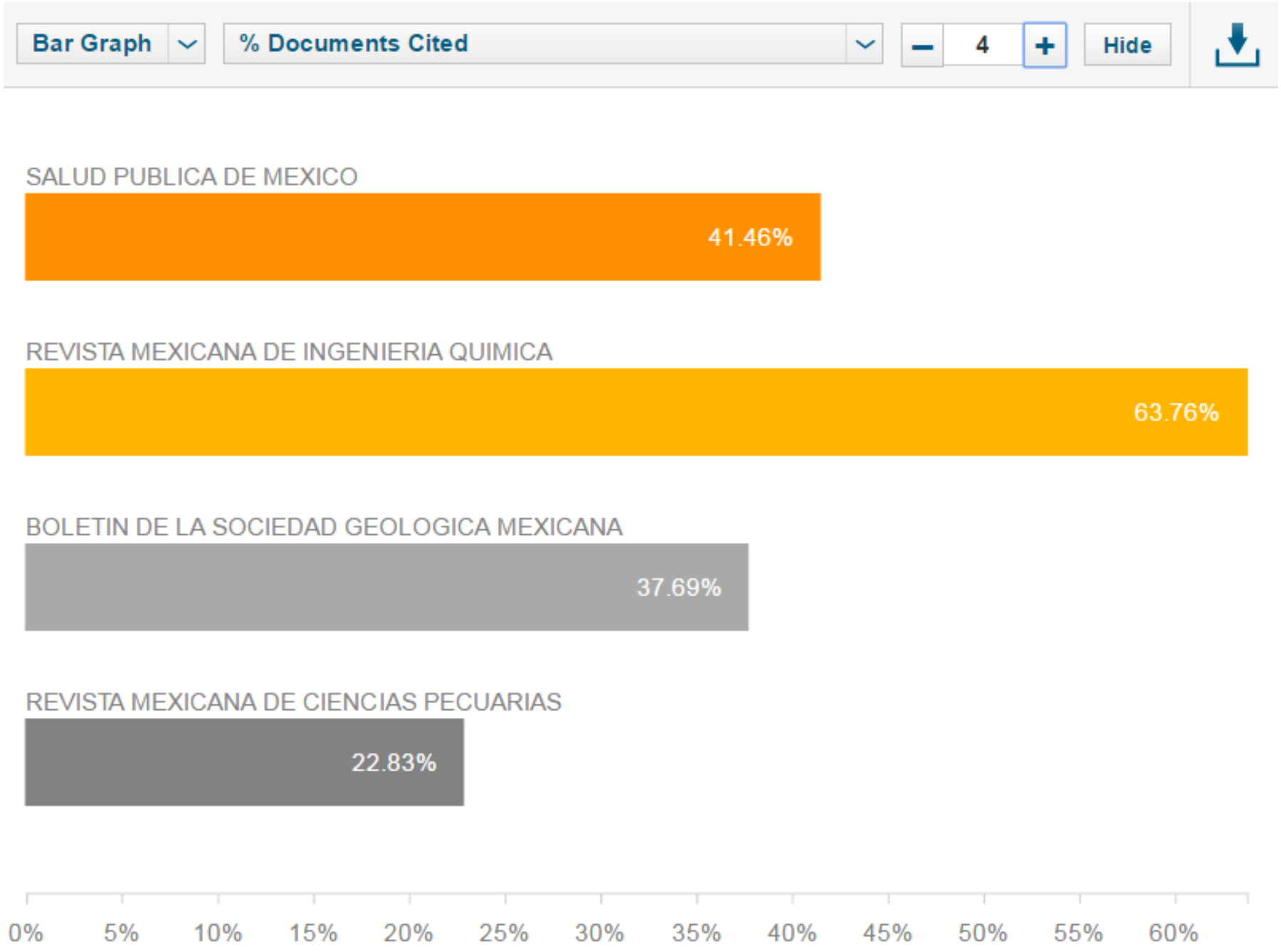
TITULO	ISSN	JIF 2014	JIF 2015	RANK 2014	RANK 2015	Quart 2014	Quart 2015	Average Journal Impact Factor Percentile
POLITICA Y GOBIERNO	1665-2037	0.172	**0.24**	144/161	141/163	Q4	Q4	13.804
Papeles de Poblacion	1405-7425	0.071	**0.20**	25/25	24/26	Q4	Q4	9.615
Investigacion Bibliotecologica	0187-358X	0.104	**0.15**	76/85	80/86	Q4	Q4	7.558
Economia Mexicana-Nueva Epoca	1665-2045	0.077	**0.14**	327/333	330/344	Q4	Q4	4.215
Gestion y Politica Publica	1405-1079	0	**0.10**	46/46	46/47	Q4	Q4	3.191

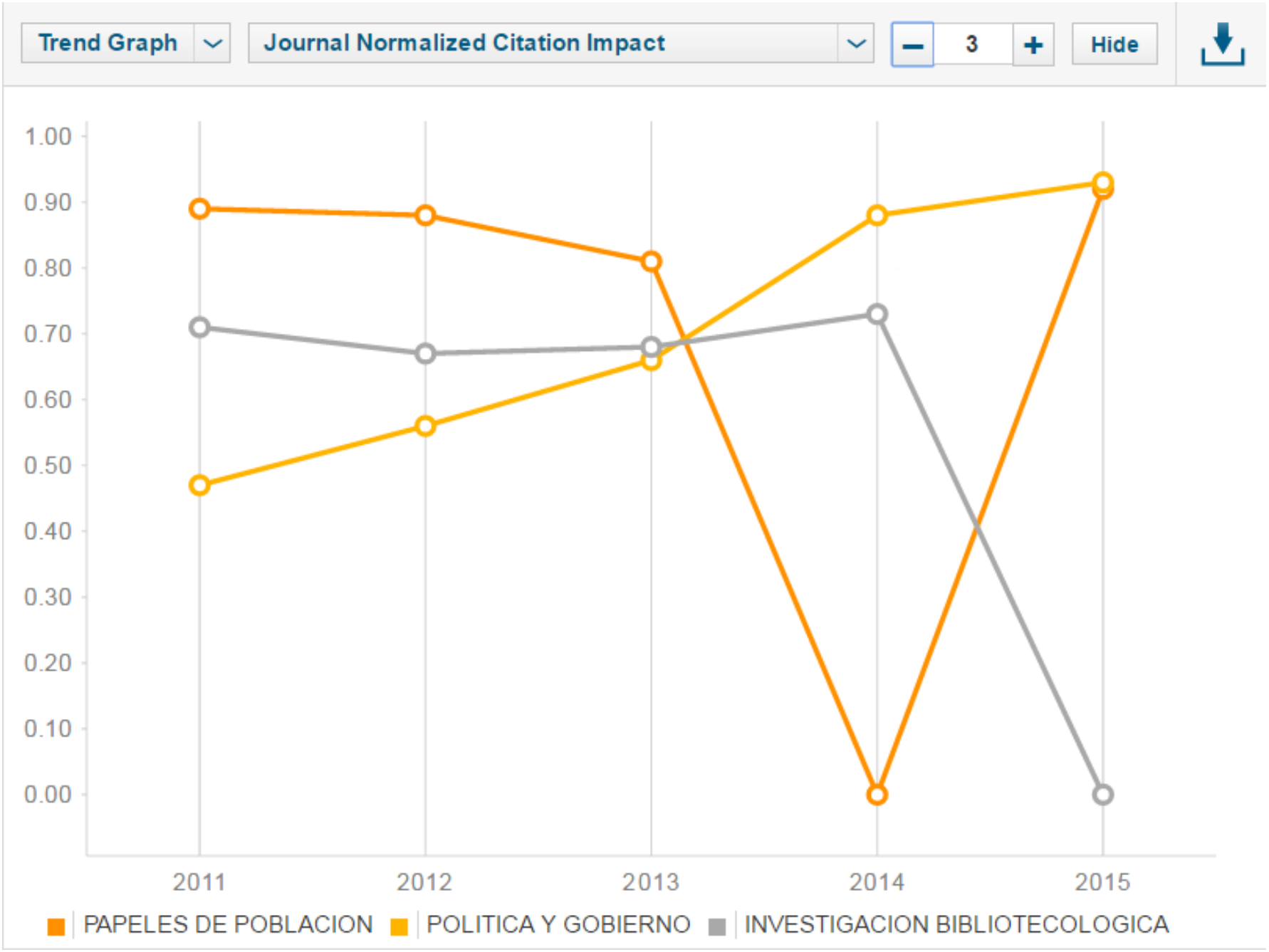
This list includes those journals with positive changes regarding past 5 years.

Average JIF Percentile allow us to compare journals in different subject areas

Trend Graph | Journal Normalized Citation Impact | – 4 + | Hide




Bar Graph
% Documents Cited
4
Hide
SALUD PUBLICA DE MEXICO
41.46%
REVISTA MEXICANA DE INGENIERIA QUIMICA
63.76%
BOLETIN DE LA SOCIEDAD GEOLOGICA MEXICANA
37.69%
REVISTA MEXICANA DE CIENCIAS PECUARIAS
22.83%
0%
5%
10%
15%
20%
25%
30%
35%
40%
45%
50%
55%
60%


Trend Graph
Journal Normalized Citation Impact
3
Hide
1.00
0.90
0.80
0.70
0.60
0.50
0.40
0.30
0.20
0.10
0.00
2011
2012
2013
2014
2015
PAPELES DE POBLACION
POLITICA Y GOBIERNO
INVESTIGACION BIBLIOTECOLOGICA

After Complete Analysis

TITULO	Index	JIF 2015	5-Year JIF	Quartile 2015	Average Journal Impact Factor Percentile	% Documents Cited 5-Years	Normal Eigenfact	Journal Normal citation Impact
R	Science	0.924	0.812	Q3	31.993	63.76%	0.031	0.99
	Science	0.577	0.628	Q3	37.069	22.83%	0.065	0.99
	Science	0.679	Not Av	Q3	26.596	37.69%	0.061	0.98
	Social Science	0.235	0.365	Q4	13.804	13.40%	0.013	0.68
	Social Science	0.200	0.271	Q4	9.615	7.73%	0.016	0.70
	Social Science	0.146	0.217	Q4	7.558	8.24%	0.01	0.56
S	MULTI*	1.107	1.184	Q3	32.353	41.46%	0.278	0.90

2016 – Most Influential Mexican Journal – Social Science:

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2016 – Most Influential Mexican Journal Science:

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2016 Most Influential Mexican Journal Science

2016 – Most Influential Mexican Journal Social Science

2016 Special recognition Multidisciplinary

Salud Pública de México

DR. MAURICIO HERNÁNDEZ ÁVILA

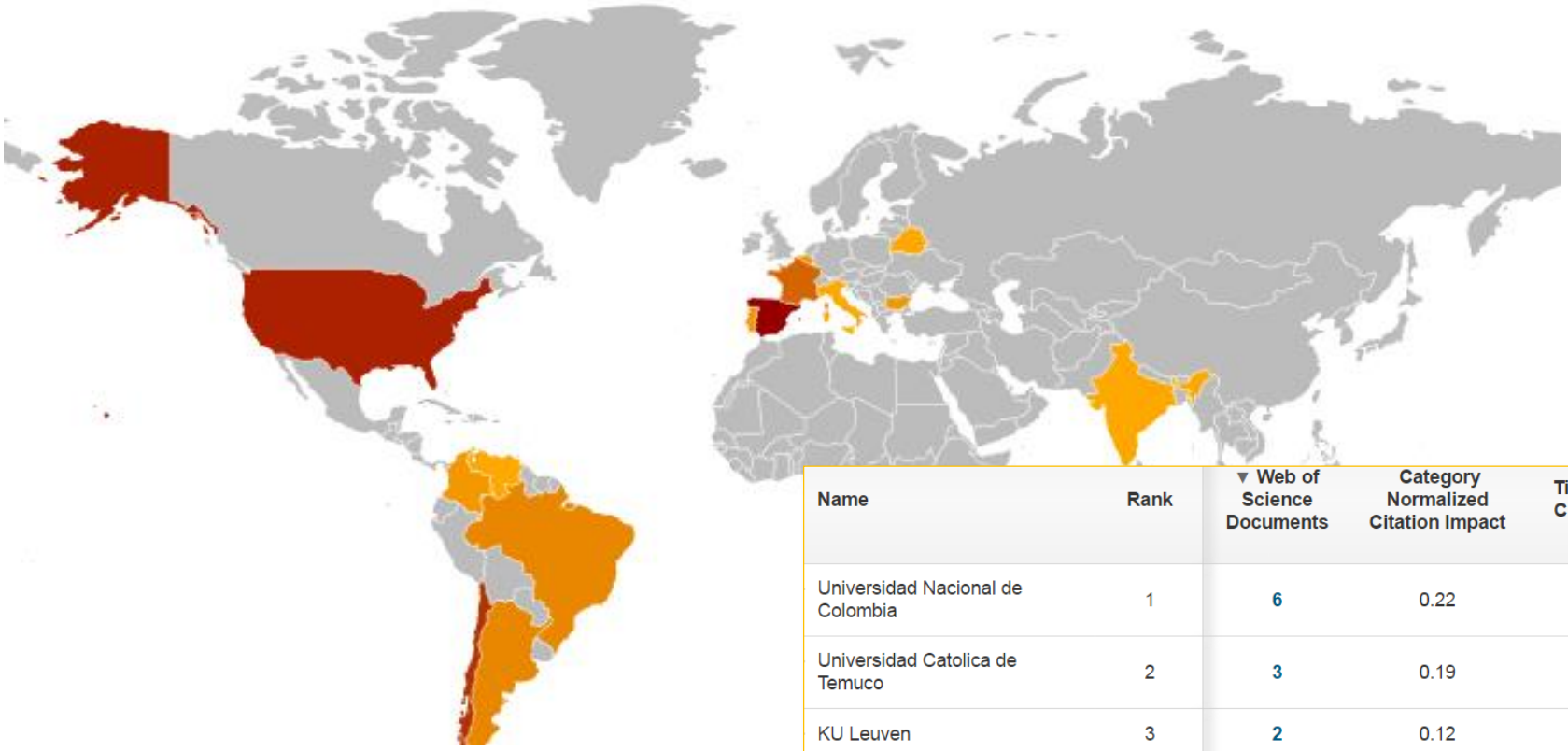
Alto posicionamiento

"SALUD PUBLICA DE MEXICO" is originally included within JCR -SSCI under PUBLIC, ENVIRONMENTAL & OCCUPATIONAL HEALTH.

However for this analysis we considered this journal as "multi-disciplinary" journal because the article production includes some others like General Medicine, Medicine Research, Anatomy & Morphology.

REVISTA MEXICANA DE INGENIERIA QUIMICA

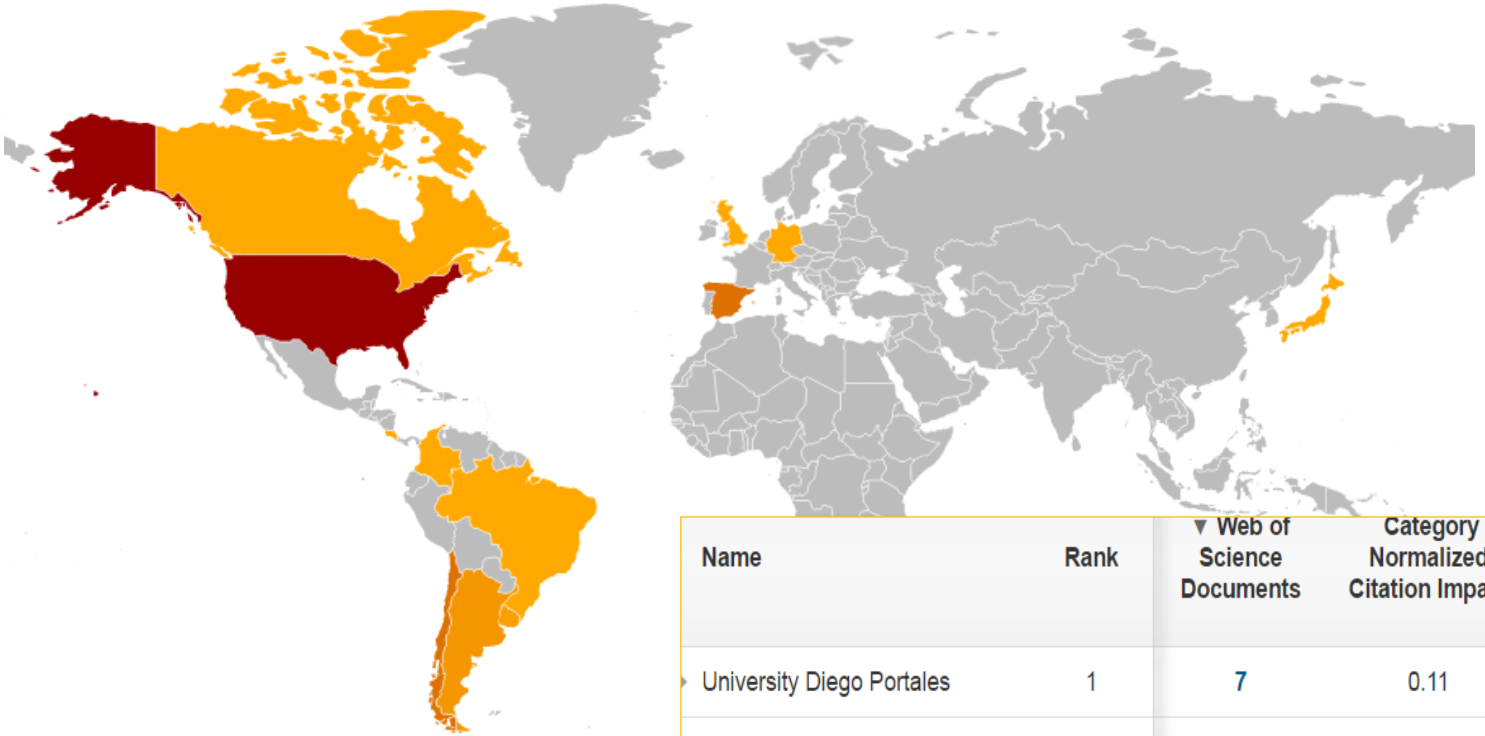
INTERNATIONAL COLLABORATION



Name	Rank	▼ Web of Science Documents	Category Normalized Citation Impact	Times Cited	% Docs Cited
Universidad Nacional de Colombia	1	6	0.22	4	66.67%
Universidad Catolica de Temuco	2	3	0.19	5	66.67%
KU Leuven	3	2	0.12	1	50%
Ghent University	4	2	0.12	1	50%
Bulgarian Academy of Sciences	5	2	0.26	6	50%
Consejo Superior de Investigaciones Cientificas (CSIC)	6	2	0	0	0%
Universidad de Las Palmas de Gran Canaria	7	2	0.33	6	100%
Universidade da Coruna	8	2	0	0	0%

POLITICA Y GOBIERNO

INTERNATIONAL COLLABORATION



Name	Rank	▼ Web of Science Documents	Category Normalized Citation Impact	Times Cited	% Docs Cited
University Diego Portales	1	7	0.11	1	14.29%
University of Pittsburgh	2	5	0.1	1	20%
Pennsylvania Commonwealth System of Higher Education (PCSHE)	3	5	0.1	1	20%
Consejo Nacional de Investigaciones Cientificas y Tecnicas (CONICET)	4	5	0.78	3	40%

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