

## Description

How topical and important are articles published in journals? Which journals should a researcher skim through if he wants to keep up with new and exciting research? One measure that attempts to quantify this is the **Immediacy Index** of journals.

## How it is Calculated?

Immediacy index and journal [impact factor](#) (IF) are both calculated by the Institute for Scientific Information and in much the same way; for a certain publication time range, the total citations of a journal's papers during one year is divided by the number of papers. This gives an average number of citations per paper for the year in question. IF bases citations on papers published in the two years before the year in question, e.g., for the year 2014, IF considers all citations made in 2014 of papers published in 2012 and 2013.

In contrast, immediacy index has a much more restrictive time range for its calculation, considering only the actual publication year for both papers and citations. For the year 2014, only citations made in 2014 of papers published in 2014 are considered.

## Immediacy Index vs. Impact Factor Rankings

Here is how the 2011 immediacy index compares to IF for a few [well known scientific journals](#) (as obtained from ResearchGate).

<u>Journal</u>	<u>Immediacy Index</u>	<u>Impact Factor</u>
Chemical Communications	1.53	6.38
Journal of the American Chemical Society	2.16	10.68
Chemical Reviews	14.34	41.3

From this table it is not obvious that immediacy index measures what it purports to, i.e., how topical and urgent scientific articles are. Why does Chemical Reviews rank so high? Surely not because its articles are considered particularly urgent or topical. They are widely cited because they are long, detailed surveys of a fairly broad research topic. Relatively few articles are published each year by Chemical Reviews but each one is essentially ten papers in one and will be of interest to researchers in a broad range of work. On the other hand, the much larger number of articles in Chemical Communications individually concern narrow areas of research and are of interest to a much smaller number of researchers on a per article basis. Note that the ordering of immediacy index vs. IF is the same for the three journals shown. Although one would expect that Chemical Communications would have the highest rating for urgent, topical interest in scientific articles, immediacy index shows the

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opposite.

## What Does Immediacy Index Reveal?

I don't think immediacy index is a good indicator of how topical and urgently important papers published by a journal are. For a measure of how topical a journal is, I recommend considering the [journal cited half-life](#).

### Category

1. Publishing Research
2. Selecting Journals

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