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Scientific Articles: 1988-2003”**

## TRENDS IN INFLUENTIAL ARTICLES AND JOURNALS

A publishing center’s authorship of prominent S&E articles can be an indicator of the quality or influence of the research results it produces. Two citation measures are used to gauge quality and influence: (1) the frequency with which an article is cited and (2) the frequency of citation to the journal in which the article appears. Better and more influential articles tend to generate more citations. Because articles in frequently cited journals tend to be more widely noticed, these journals are able to attract better submissions and to publish better articles. These citation measures provide an indication of capability and competitiveness at the frontiers of research.

Footnotes: Citations are not a straightforward measure of either quality or influence. Other factors affect what authors chose to cite; e.g., they are likely to cite their own previous articles and the work of colleagues, mentors, friends, or scientists in their own country. Different fields have different citation patterns. In addition, authors who are members of relatively large disciplinary or national communities are cited more frequently than those in smaller communities.

Journals are ranked by the average number of citations to articles published in each journal. Because the journal citation ranking is an average, articles appearing in highly cited journals may not necessarily be highly cited.

Citation counts are based on a 3-year period with a 2-year lag.