

One Secret for a High Citation Rate

Gianfranco Carotenuto ^{1,*} and Francesca Nicolais ²

¹ Institute for Polymers, Composites and Biomaterials (IPCB-CNR), National Research Council, Piazzale E. Fermi, 1-80055 Portici, Italy

² Centro Scienza Nuova, Università degli Studi Suor Orsola Benincasa, Via Suor Orsola, 10-80135 Napoli, Italy

* Correspondence: gianfr.carotenuto@virgilio.it

The relevance of the technical results included in a scientific paper is proved by the quantity of citations received by the article over the years [1]. The approach selected for publishing a paper plays a determining role in achieving the maximum number of citations that would be possible for that article [2,3]. This target can be attained only by publishing in open access journals [4–7], having the highest impact factor, and perfectly matching the topic treated by the article. The number of article citations increases with a rapidity that is related to the treated topic and, in particular, to the number of participants in the scientific community that act in that special research field. Some scientific communities have many scholars, and therefore, papers concerning such fields of knowledge are frequently read and, as a consequence, receive large quantities of citations. For example, a medicine-related article is usually much more frequently cited than an article concerning a theoretical physics topic. In addition, in the same technical field, articles related to a “hot topic” (e.g., cancer research, genomics, SARS-CoV-2, etc.) are much more cited than others. The citation rate depends also on the relevance of the treated topic with regard to modern society and the novelty of its content [8]. A further important possibility to increase article visibility is represented by those actions that authors can perform post-publication. Indeed, in the present society of knowledge, social media and social networks can be advantageously used for academic activities [3]. For example, the article full-text can be uploaded on social networking sites specifically designed for scientists, like ResearchGate. A YouTube video can be also prepared in order to widen the publication audience. The key publication findings can be organized in form of slides and this presentation made available by uploading to the Web on SlideShare. Further useful approaches to increase research visibility can be based on Twitter channel announcements, scientific blogs, LinkedIn, etc.

Are there any other useful tricks to achieve a large number of citations? A fundamental preface to such a problem is that the article technical content, that is, the described results, is surely the determining factor for the number of citations that the article could potentially receive after an adequate publishing process. A pioneering article, i.e., an article that reports about a very important achievement (i.e., a new equation/law, a new concept, a novel theory, etc.) for the first time for a certain field of research is surely fated to receive a high number of citations. Differently, an in-depth analysis article which describes in great detail some already known results and/or phenomena will certainly be cited much less than a very original and pioneering article. Therefore, the problem to be solved is how to obtain the deserved amount of attention for a certain result, and consequently, reach the maximum citation number that meets the potential for that paper.

During the bibliographic search, the attention is first focalized on the article title [9] rather than on the abstract, whose aim is to provide a complete and adequately summarized description of the achieved results. Therefore, the article title is a key factor that plays a very important role in pushing the scientific community to read the article and to adequately cite it [10,11]. A title that excessively elevates the obtained results could leave the readers disappointed by what they have effectively found in the paper; however, it surely will persuade the scientific community to pay attention to that article, to carefully read it,



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and, owing to the attention raised by the title, to cite it anyway, since at least the title is interesting. Therefore, the key to success could be to adequately formulate the article title by giving the maximum attention to it and thinking over its optimization, modifying it and shaping it carefully with the aim to highlight as much as possible the reported scientific results. The article title should work like a “strong magnet” in that it is capable of attracting the attention of the scientists that have interest in that topic since they are involved in that specific research area. However, what is the limit that it is possible to magnify the achieved results? Do not worry about it and do not be modest; remember: “the ends justify the means” (Niccolò Machiavelli, sentence in Chapter XVIII of “the Prince”). We want the article to be read whatever it takes; we want to seduce the potential readers, and this requires a title that is as attractive and fascinating as possible. The article needs to be read, since only in this case it can be cited proportionally to its real value. Certainly, the title must clearly reflect the paper’s content and, therefore, pertain to the type of results that have been achieved and are described in the paper; otherwise, the title is misleading and will not fall within the bibliographic search that scholars perform. However, it is necessary to use unusual words, attractive terms, new nouns, etc. Yes, some words can be much more attractive than others, and it is from inside this domain we need to select our words. The findings announced in the title, which must correspond to the article’s content, cannot be changed too much, as otherwise the title risks being inappropriate since it does not reflect the real content of the paper, thus causing the paper to not show up in bibliographic searches. Therefore, words must be carefully examined and opportunely selected from those that are less usual and more capable of raising curiosity. Words that are not expected for that particular field of research are the most suggested, including words never used before for the description of that concept/content. The most unusual, intriguing, charming, unexpected synonym words need to be selected. The power of words can raise curiosity. A title whose content has been expressed by using words that have been accurately selected from among those more unusual for that field of research and that do not create any obstacles for the comprehension of the treated topic may cause a much deeper reading of the article and will push the reader to look for what has been announced by the article title. Scholars certainly will read the paper with great attention, and therefore, they will be more likely to cite it, since they have acquired (as well as memorized/assimilated) the results described therein. The title content must be honest, but it must be provided in the most captivating manner by adequately selecting the words and by using synonyms capable of intriguing the readers. Expected words must not be used, but rather the words should have some allusive meaning, with similarities capable of inciting curiosity about the real content of the paper. Very intriguing similitudes must be used to force the reader to read the article. Just this curiosity will work for us, pushing the reader to read through the paper and persuading them to find some new concept in their field that by now they know well and probably believe mostly depleted.

To excite the curiosity is the key to be used; it is the tool for capturing the reader. Which human emotional force drives a scientist? This force is curiosity [12,13], and just this force must be used. Hate, jealousy, love, etc., could be considered “emotional forces”, and curiosity is that particular driving force that moves scientists; thus, just this force must be aroused to obtain the highest number of citations. Curiosity represents the “weakness” of the researcher [14,15], or his physical vulnerability (the Achilles’ heel), and therefore, this is the point that needs to be leveraged. The paper’s title becomes the medium through which this force can operate on scholars, scientists, and researchers.

For example, if a new piezoelectric material suitable for the fabrication of a buzzer has been developed, how can the paper’s title be worded to present the readers this work in a curiosity-raising way? A title like “A new musical material” will greatly intrigue the reader infinitely more than a title like “A new piezoelectric material”, since in this case, unusual words for this particular scientific research area have been cleverly used. However, owing to the anomalous title, such a scientific paper would elude bibliographic searches and, therefore, it is necessary to leave in the title the word that exactly identifies

that field of research (i.e., the word: “piezoelectric”). A title like “A new musical material of piezoelectric type” could therefore be perfect since it excites the curiosity and does not elude the bibliographic search. A further example could be the title “A new type of zeolite for water purification”, which could be conveniently changed into “Artificial mussels based on zeolite”. Consequently, in order to achieve the maximum citation rate, unusual words for that scientific field that are strongly capable of exciting the curiosity must be preferred in the editing of the article title.

In summary, the citation rate measures the quality of a research paper. Different strategies can be used to increase the citation rate (e.g., publication in open access journals and in journals with a high impact factor). However, to reach the maximum citation rate, a research paper should be capable of attracting, as much as possible, the attention of scholars. In this context, the paper’s title plays a fundamental role. Since curiosity constitutes the driving force of the research, the article’s title should include words capable of raising curiosity. All titles should be carefully prepared with the aim to inform about the paper’s content by increasing curiosity in the readers.

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References

1. Abt, H.A. Why some papers have long citation lifetimes. *Nature* **1998**, *395*, 756–757. [[CrossRef](#)]
2. Ebrahim, N.A.; Salehi, H.; Embi, M.A.; Tanha, F.H.; Gholizadeh, H.; Motahar, S.M.; Ordi, A. Effective strategies for increasing citation frequency. *Int. Educ. Stud.* **2013**, *6*, 93–99. [[CrossRef](#)]
3. Khan, K.M.; Ali, K.S. Web tools and technologies to increase citation frequency by use of social media: An appraisal. *Int. J. Res.* **2020**, *8*, 31–36. [[CrossRef](#)]
4. Craig, I.D.; Plume, A.M.; McVeigh, M.E.; Pringle, J.; Amin, M. Do open access articles have greater citation impact? A critical review of the literature. *J. Informetr.* **2007**, *1*, 239–248. [[CrossRef](#)]
5. Lawrence, S. Free online availability substantially increases a paper’s impact. *Nature* **2001**, *411*, 521. [[CrossRef](#)] [[PubMed](#)]
6. Aksnes, D.W. Characteristics of highly cited papers. *Res. Eval.* **2003**, *12*, 159–170. [[CrossRef](#)]
7. Wren, J.D. Open access and openly accessible: A study of scientific publications shared via the internet. *BMJ* **2005**, *330*, 1128. [[CrossRef](#)] [[PubMed](#)]
8. Eysenbach, G. Citation advantage of open access articles. *PLoS Biol.* **2006**, *4*, e157. [[CrossRef](#)] [[PubMed](#)]
9. Jacques, T.S.; Sebire, N.J. The impact of article titles on citation hits: An analysis of general and specialist medical journals. *J. R. Soc. Med. Short Rep.* **2010**, *1*, 2. [[CrossRef](#)] [[PubMed](#)]
10. Paiva, C.E.; da Silveira Nogueira Lima, J.P.; Paiva, B.S.R. Articles with short titles describing the results are cited more often. *Clinics* **2012**, *67*, 509–513. [[CrossRef](#)] [[PubMed](#)]
11. Letchford, A.; Moat, H.S.; Preis, T. The advantage of short paper titles. *R. Soc. Open Sci.* **2015**, *2*, 150266. [[CrossRef](#)] [[PubMed](#)]
12. Tomczak, M. On the Driving Forces of Science. *Int. J. Sci. Soc.* **2014**, *5*, 1–10. [[CrossRef](#)]
13. Bast, F. In Defence of Curiosity Driven Basic Scientific Research. *Sci. Rep.* **2020**, *57*, 21–24.
14. Jirout, J.J. Supporting early scientific thinking through curiosity. *Front. Psychol.* **2020**, *11*, 1717. [[CrossRef](#)] [[PubMed](#)]
15. Jirout, J.; Klahr, D. Children’s scientific curiosity: In search of an operational definition of an elusive concept. *Dev. Rev.* **2012**, *32*, 125–160. [[CrossRef](#)]

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