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## Why was I TopCited...?

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## Why did you cite...?



# Why was I TopCited...?

Scopus recently introduced a new service, **Scopus TopCited**, which presents the most-cited articles in 26 different subject areas worldwide.

However, while TopCited can tell us *who* was highly cited, it does not tell us *why* the paper was so popular. To shed some light on what makes a successful paper, we asked four TopCited authors why they think their paper had such an impact.

Dr. David Spergel's paper, "Three-year Wilkinson Microwave Anisotropy Probe (WMAP) observations: Implications for cosmology", published in the *Astrophysical Journal* (1), received 504 citations in the subject area Earth and Planetary Science between 2004–2008.

Dr. Spergel believes his paper was highly cited because it "discusses new results from a major scientific mission and the implications for our understanding of cosmology. Also, it includes the basic cosmological parameters, which are widely used in physics and astronomy."

Prof. Younan Xia and Dr. Dan Li's paper, "Electrospinning of nanofibers: Reinventing the wheel?", published in *Advanced Materials* (2), was cited by 379 other papers within Materials Science from 2004 to 2008.

Professor Xia thinks the main reason his paper was highly cited is because it reviews the fundamentals and presents recent advances in the field of electrospinning, serving as a useful reference paper.

He adds, "The recognition of electrospinning by the research community is due to the fact that it is simple, inexpensive and convenient to use; it is applicable to many kinds of materials; and nanofibers, with complex secondary structures, can be readily prepared with modified setups."

Drs. Paul Emsley and Kevin Cowtona's paper, "Coot: Model-building tools for molecular graphics", published in *Acta Crystallographica Section D: Biological Crystallography* (3), was cited by 1,419 papers in the subject area Physics and Astronomy between 2004–2008.

Dr. Emsley explains that his paper was highly cited because it discusses a useful program for structural biologists. The impact of the paper can be attributed to the fact that the program is so widely used. He says, "The use of interactive graphs and plots, particularly for model validation, was novel and provides a simpler environment than had been available before."

On citation habits in general, he adds that some popular journals have started to omit citations in supplementary materials where the experimental details are more fully described. "This badly bites into the citation count for works such as ours and is something of which I, and I presume Dr. Cowtona, disapprove."

Dr. Søren Brunak's paper, "Improved prediction of signal peptides: SignalP 3.0", published in *Journal of Molecular Biology* (4), was cited by 1,242 papers in the subject area Immunology and Microbiology in the time period 2004–2008.

Dr. Brunak says his paper was highly cited for two reasons. First, his tool for signal peptide prediction, SignalP, is unique in that it produces a higher than expected quality of predictions. Second, **SignalP** is easy to use and freely available on the Internet.

#### References:

- [1] Spergel, D.N. (2007), "Three-year Wilkinson Microwave Anisotropy Probe (WMAP) observations: Implications for cosmology", *Astrophysical Journal*, Supplement Series, Vol. 170, Issue 2, pp. 377–408.
- [2] Li, D., Xia, Y.N. (2004), "Electrospinning of nanofibers: Reinventing the wheel?", *Advanced Materials*, Vol. 16, Issue 14, pp. 1151–1170.
- [3] Cowtona, K. and Emsley, P. (2004), "Coot: Model-building tools for molecular graphics", *Acta Crystallographica Section D: Biological Crystallography*, Vol. 60, Issue 12 I, pp. 2126–2132.
- [4] Brunak, S. (2004), "Improved prediction of signal peptides: SignalP 3.0", *Journal of Molecular Biology*, Vol. 340, Issue 4, pp. 783–795.