

The Art of Writing the Title of Your Paper

Perhaps one of the most challenging aspects of assembling a manuscript is the writing of an ideal title. It is obvious that the title states what the paper is about, but doing so in as few words as possible can be challenging. Most full paper articles are multifaceted and may combine different types of experiments, different materials, theory and experiment, and/or fundamentals and examples of interdisciplinary applications. The difficulty one faces is therefore deciding what your paper is truly about and what you consider to be important. In addition, within a collaboration, different authors may have varying opinions on what they consider to be the central theme or result of the paper. To draw a paper together from the start, a well-crafted introduction may take several paragraphs to cover the various aspects you, as the authors, feel are necessary to illustrate the landscape, or context, in which your work resides, particularly if the work is indeed multifaceted. With respect to the title, however, there is no such luxury: We can have only one title.

A title should be composed of a maximum of 20 words, and these 20 words need to convey enough information to encourage a reader to click on your paper, download it, and read it.

> We strongly believe that the science should speak for itself and that the use of adjectives that sound too self-promoting can only backfire on authors because they hint that your work is superficial or, even worse, dubious.

We strongly believe that the science should speak for itself and that the use of adjectives that sound too self-promoting can only backfire on authors because they hint that your work is superficial or, even worse, dubious. Here we provide some advice and three examples that, when coupled with their corresponding Table of Contents (ToC) images, generate in the reader's mind an accurate notion of what paper is about.

Suggestions for writing your title

- (i) When you start composing your title, begin with the nouns, such as the name of the material(s) you studied and the important aspects of what you have learned. Ask yourself objectively if adjectives are needed to make your title compelling. The science needs to speak for itself without "window dressing" with extraneous and unneeded descriptive words.
- (ii) Make sure that your title is grammatically sound. Have it checked by a trusted colleague to ensure no mistakes; a title with even one mistake will cause potential readers to mistrust your work before even reading it.
- (iii) If you cannot write your title in fewer than 20 words, it may be that the focus of your paper has not yet been thoughtfully developed. Perhaps the inability to write a succinct title is a symptom of a manuscript that lacks cohesion or a clearly described central theme.

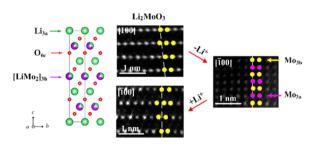
- (iv) If you are using terms such as "green", "efficient", or, commonly these days, "highly efficient" in your title, you will need to support your use of these terms very clearly in your manuscript. Well-described literature comparisons are required to demonstrate that your work is, in fact, green, or highly efficient.
- (v) Ensure that your title resonates with your ToC image.

To avoid when composing your title

- (i) Superlatives, such as "superior", or adjectives such as "enhanced" are strongly discouraged. Calling your work "superior" immediately raises suspicions and questions in a reader's mind; if the work is truly superior, the results will be recognized as such thanks to your well-written introduction that makes fair and valid comparisons with the prior literature. From our perspective, we see that the word "superior" is used loosely without appropriate comparative literature values and references or is applied to an overly specific, narrow set of circumstances. Words like "enhanced" immediately bring to mind incremental research that is not particularly interesting.
- (ii) Words such as "first" or "novel" are hollow and not helpful. One would hope that the research you wish to publish is bringing to light new insights or data, and thus would be a first and, hence, novel. These two words, and words like them, are meaningless and obfuscate the essence your title.
- (iii) Titles that provide a laundry list of potential applications do not inspire confidence that the authors put much thought into their work. Manuscripts that describe materials that have been used for a long list of applications do not suggest that any one thing has been examined in detail and therefore probably do not provide any useful or fundamentally important insights.
- (iv) Acronyms should be avoided because they tend to have little meaning outside of a specific area.

Below are three titles of papers that have just appeared in *Chemistry of Materials*, which we believe effectively convey the meaning of the paper in a manner that is succinct and exciting. The strength of these titles is their simplicity, while conveying a sense of the contents of the paper in \sim 10 words.

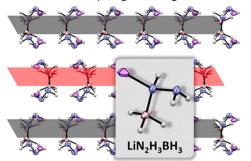
Feasibility of Using Li₂MoO₃ in Constructing Li-Rich High Energy Density Cathode Materials



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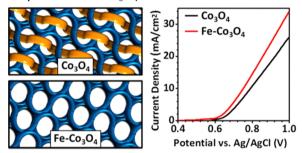
Published: June 10, 2014

Lithium Hydrazinidoborane: A Polymorphic Material with Potential for Chemical Hydrogen Storage



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Influence of Fe Doping on Structure and Water Oxidation Activity of Nanocast Co_3O_4



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The science speaks for itself in each of these three examples. As always, we look forward to hearing from you.

Jillian M. Buriak, Editor-in-Chief

AUTHOR INFORMATION

Notes

Views expressed in this editorial are those of the author and not necessarily the views of the ACS.

REFERENCES

 Ma, J.; Zhou, Y.-N.; Gao, Y.; Yu, X.; Kong, Q.; Gu, L.; Wang, Z.; Yang, X.-Q.; Chen, L. *Chem. Mater.* **2014**, DOI: 10.1021/cm501025r.
Moury, R.; Demirci, U. B.; Ban, V.; Filinchuk, Y.; Ichikawa, T.; Zeng, L.; Goshome, K.; Miele, P. *Chem. Mater.* **2014**, DOI: 10.1021/

cm500980b.

(3) Grewe, T.; Deng, X.; Tüysüz, H. Chem. Mater. 2014, DOI: 10.1021/cm5005888.