

Peter Solfest

Major: Physics

Citation style: Varies by Journal

1) Dr. Moscatello, Jason. Personal Interview. 8 July, 2010.

Dr. Moscatello is a physicist working in molecular electronics and their application. When asked about the difficulty of articles, he claimed that anyone with a college education (no matter the field) should be able to read and follow a well written article, but this often fails to happen in practice. This is partly due to amount of jargon used, which varies quite a bit across physics. Dr. Moscatello's field especially, since it is interdisciplinary. Furthermore, some fields of physics produce much harder articles to read, such as particle physics since all the equipment is customized. Other than particle physics and papers dense in jargon, anyone should be able to understand the main points of an article, if not the specific methods used.

Papers across all the physics fields, including experimental, computational and theoretical, tend to have the same layout. They begin with an abstract (after listing the authors and their home departments), followed by an introduction. This includes the motivation to do this paper and a brief summary of the background behind this paper along with the typical introductory overview of the paper. This is followed by a section on the methods used (experimental, computational, or derivations if the paper is theoretical). In experimental papers a diagram is often used to show the set up. This is followed by a results and analysis section, in which papers list the results (often in graphs if done computationally, or in pictures if done experimentally). It then ends with a summary and conclusion.

I then proceeded to ask Dr. Moscatello what the citation style was like in physics, and he described it as fairly simple, but defined by each journal individually. It usually includes the authors, the journal, the

date published and which pages the article is on. This seems kind of silly, since he also said that unless one is looking for an old article, journals post articles online and that is where you typically read them.

Dr. Moscatello's email: jpmoscat@mtu.edu

2) *Journal of the American Chemical Society* **2010** 132 (27), 9223-9512

The Journal of the American Chemical Society (JACS) is an online journal recommended by Dr. Moscatello, since it has so much on nanotubes within it. JACS has everything online (but also a print edition), and charges by the article if one is just browsing through articles, or may be provided through the university's library. When browsing through articles online, it gives the title, authors, information on its publishing date, and a series of figures from the paper. From this there are links to either the abstract (which is free), or the full article (for a fee). The articles themselves can either be viewed as a PDF or a webpage in its own right. This implies that JACS formats the article themselves once it is submitted. Other than this, it pretty much confirmed what Dr. Moscatello said. The only difference is that many articles have an acknowledgements section, acknowledging sources of funding. JACS uses the following citation style:

<Article title>

<Authors (full name)>

<Journal> <year> <volume number>(<issue number>), <pages>

3) Carbon 2010;48(7):2127-2382.

This is a printed journal dealing with advances in carbon research, also recommended by Dr. Moscatello since it does so much with nanotubes. Through outside providers (such as Science Direct), one can find digitized versions of its articles. But it is still published as a primarily printed journal. The cover usually has an image from one of the papers within it. After scanning the papers within this journal, I found it slightly easier to read than JACS, for there was less chemistry jargon. There seemed to be overall just less jargon than JACS, but that is probably just the difference between the highly interdisciplinary field within Carbon and a more chemically oriented JACS. There is not a lot more to the journal except articles, which vary by author, thus there is not many more differences between JACS and Carbon. Here is the Carbon citation style:

<Last name><initial>, <More Authors>. <Article Title>. <Journal name>
<year>;<volume>(<issue>):<pages>.

4) "AIP: Physics of Plasmas: Citation Format" *pop.aip.org*. Published 2010. American Institute of Physics.

Accessed 28 July 2010.

This source was used as an example of the American Institute of Physics (AIP) citation style. This is used in all journals and by all organizations which are a part of the AIP (this includes over 25 organizations). As such, it is a fairly standard format for citations within the field of physics. But it is in no way the authoritative end all be all of physics citations. It is similar to most other citation formats within physics though. Here is the style used within aip:

<Authors (first initial, last name. separated by commas)>, <Journal Name> <Volume number>, <6 digit identifier>(<year>).