## Chapter 15 Double Publication

Peer-reviewed journals almost always have a restriction against double publication—submitting for publication a manuscript that is substantially the same as one that has already been published by another peer-reviewed journal. A related concept (which is also prohibited) is double submission, where the same or substantially the same manuscript is under consideration for publication by two peer-reviewed journals simultaneously. At the *Journal of Micro/Nanolithography, MEMS, and MOEMS* (JM³), for example, manuscript submission includes a requirement that the submitter acknowledge any prior publication of any of the major results/data/figures/etc. found in the submitted manuscript. But while submitting a manuscript that has already been published is an obvious problem, defining when duplicate content crosses the line to duplicate publication is not always easy. What, exactly, does "substantially the same" mean?

## 15.1 Something Old, Something New

Among other criteria, a manuscript must contain something novel to make it publishable in a peer-reviewed scientific journal (see Chapter 7). But not everything discussed in a paper must be novel. It is common for a paper to begin by discussing prior (already published) results before moving on to what is new. It is the authors' responsibility to clearly differentiate between prior work and new results. This can be done explicitly through direct language ("Prior work has shown..."; "In this work, we measured...") or implicitly though the use of citations. Statements that end in a citation are understood to be descriptions of prior work. Conversely, statements of results without citations are generally assumed to be novel, presented in the paper for the first time.

This is where authors sometimes get themselves into trouble. Sloppy citation practice can lead to an assumption on the part of the reader (or editor or reviewer) that prior work is being claimed as something novel in this new work. And while most authors are reasonably careful about not making such a mistake when it comes to other people's prior work (thus avoiding implications of plagiarism, see Chapter 14), they are often much less careful when citing their own prior work. "Who does it harm," the thought goes, "if I fail to cite my own prior work?"

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Two harms result from the absence of necessary self-citations. First, because the exact author lists of the previous and new paper are often different, failure to cite prior work that is re-presented in a new paper will often leave someone with too much or too little credit. Second, failing to cite one's prior work could be viewed as an implicit (and undeserved) claim of novelty.

Which brings us back to the topic of double publication. My rule of thumb is that at least 50% of the major results/data/figures/etc. found in a manuscript submitted to a peer-reviewed journal must be novel to permit publication. This is just a guideline, however, and depends somewhat on the significance of the new results. Obviously, having the new material clearly distinguishable from the old is a requirement for assessing whether a submitted manuscript presents new science or is "substantially the same" as one or more prior publications. It is a serious ethical lapse to purposely leave out citations to one's own prior work in order to try to pass off a substantially duplicate paper as something new.

In summary, proper citations are necessary for many reasons (see Chapter 5), not the least of which is to distinguish what is novel in the paper. The criteria for proper citations do not depend on whether the prior work is your own or someone else's, or whether the prior work was published in a peer-reviewed journal, conference proceedings, or some alternate publication medium. Sloppy citation practice veers into citation malpractice when leaving off a citation helps to induce an editor (or reviewer or reader) to believe that something old is something new.

## 15.2 The Role of Conference Proceedings

Let me repeat my definition of double publication: submitting for publication a manuscript that is substantially the same as one that has already been published by another peer-reviewed journal. The last constraint, that only peer-reviewed publications are considered when evaluating double publication, is not universally adopted in scientific publishing. Some journals are far more restrictive, banning duplicate content from conference proceedings, conference abstracts, website postings, or even press releases.

SPIE has a fairly lenient policy about submitting the content of conference proceedings papers to one of its peer-reviewed journals. The reason is simple: SPIE recognizes the important and unique role of conferences, and their proceedings, in the growth of scientific knowledge as complementary to the important role of peer-reviewed journals. Our philosophy is that conferences and journals should work together rather than in competition. Conference proceedings provide a record of the conference, a snapshot in time of a rapidly developing field of science or engineering. Peer-reviewed journals provide an asynchronous look at a completed effort (or at least a milestone in a larger effort), carefully presented to provide lasting value to the scientific community.

Because both types of publications are important, SPIE allows previously published conference papers to be submitted, in whole or in part, to an SPIE peer-reviewed journal, given that certain criteria are met. Not all journals have such a policy, and it is important to investigate the details of what counts as double

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publication at the specific journal you wish to submit to. In all cases, citation of the prior conference proceedings is required.

## 15.3 Conclusions

Unfortunately, journal editors sometimes have to deal with the problem of double publication. Occasionally, the problem is unintentional, the result of sloppy citations and lack of consideration of the topic. Frequently, though, authors are trying to inflate their publication counts by spreading a body of work too thin and over too many papers. I hope that authors will take the lessons of this chapter seriously, and editors will have to deal with fewer and fewer of these issues over time.