

EDITORIAL

Why you should publish your best papers in *American Mineralogist: An International Journal of Earth and Planetary Materials*

If you read no further, you should know that you will (1) reach your intended audience, (2) receive more citations and attention compared to *Science* or *Nature* (as we demonstrate below), and (3) provide crucial support to one of the few remaining non-profit organizations that act as sole publishers in the areas of Mineralogy, Petrology, and Geochemistry. As to the latter, the Mineralogical Society of America (MSA) offers many benefits, including astonishingly low subscription costs at both the professional and student level, various Open Access options, free access to back issues (1916–1999), free open access to supplementary data files, and free online color to MSA members, to name just a few. Of course, you also make your home journal a better read.

Please consider the import of the question that forms the title of our essay. *American Mineralogist* is already a terrific journal with an international reputation, and an elite standing (Putirka et al. 2013, *Am. Mineral.*, 98, 1055–1065; i.e., *American Mineralogist* is among the top 12% of all journals in the Earth Sciences that garner 75% of all citations among all journals in the discipline). It is MSA's flagship publication, and among purely society-published journals, is the most prestigious by any measure in the fields of mineralogy, petrology, and geochemistry. As noted by Putirka et al. (2013), however, this reputation is subject to change [only a decade ago, *American Mineralogist* would be classified as “super-elite,” i.e., among the top 4% of journals that garner 50% of all citations in a discipline; see Putirka et al. (2013)], as we face a wide variety of challenges including the greater resources deployed by commercial publishers, and competition with other open access journals. To continue to thrive in this environment, we ask MSA members to make a conscious choice to support the journal—by submitting not just good papers, but their very best works to *American Mineralogist*. Counter to common prejudices and publishing intuition, there are actually many benefits in terms of visibility and total citations when choosing *American Mineralogist: An International Journal of Earth and Planetary Materials*.

So why publish in *American Mineralogist*?

(1) You will reach your intended audience. Long gone are the days when scientists browse library stacks, focusing on key journal titles. Most scientists find articles by searching on the Web of Science, GeoRef, or other similar databases. Anything you publish in the *American Mineralogist* will be a part of these and many other essential databases of published scientific work. Your work will be fully broadcast, visible on Google, GeoRef, Web of Science, etc., to scientists of all disciplines, as well as appearing in a key journal within the discipline.

(2) Your paper will garner more attention in *American Mineralogist*, even compared to publishing in *Science* or *Nature*.

(a) Unlike *Science* and *Nature*, our Notable Paper summaries announce key publications to all your peers. Our summaries are sent to all MSA-talk members, broadcasting your work to thousands of MSA members who will read and cite your work. Preliminary data indicate that our Notable Papers are downloaded at 100 times the rate of non-noted papers in the days following electronic publication of a given issue. These Notable Paper summaries are also posted on Facebook and sent to subscribers through RSS feeds.

(b) We also bring attention to our best papers through our new Highlights and Breakthroughs articles. And like our regular articles, our Highlights and Breakthroughs are indexed by GeoRef and the Web of Science, providing additional independent links to your best papers. *Science* and *Nature* similarly highlight key articles, but the chances of being highlighted in *American Mineralogist* are vastly greater, thus increasing the likelihood of amplifying the attention that will be drawn to your paper.

No other journal focusing on Mineralogy, Petrology, and Geochemistry offers such features. Your paper is not only more likely to be highlighted by *American Mineralogist* compared to other journals, but those highlights are more likely to be viewed by scientists in your field.

(3) Your best papers will garner more citations compared to publishing in *Science* or *Nature*.

This may seem counter-intuitive, but is born out by data. Analysis of the distribution of citations shows that the very high impact factors in *Science*, for example, are derived by papers published in Medicine, Biology, and Materials Sciences—not Earth Sciences. This has nothing to do with publication quality. Rather, as shown by Putirka et al. (2013), disciplines such as Medicine have many more scientists, publishing many more papers in many more journals, providing more opportunities for citations to papers that appear in their top journals. We posit (Putirka et al. 2013) that limited attention spans act as a primary control for the observed discipline size-dependent impact factors. Regardless, a key result is that there is no intrinsic benefit to publishing in elite magazine-oriented journals in terms of audience or impact. To illustrate, consider the following: in *Earth and Planetary Science Letters* (EPSL), the most cited paper in the Web of Science database (as of June, 2013) garners 1,659 citations (since 1981). In *American Mineralogist*, the top cited paper receives 3,019 citations (since 1983). In *Science*, under the topics of “mineralogy,” “petrology,” or “geochemistry,” however, not a single paper breaks the 500-citation barrier. In contrast, *American Mineralogist* has published 10 papers that cross the 500-citation threshold, while

EPSL has published 26.

Impact factors are thus a highly misleading indicator of citation potential. Why is this the case? Because in all journals, regardless of perceived prestige, citations are nearly logarithmically distributed among all papers published in a given issue (Putirka et al. 2013). A small number are heavily cited, a few are moderately cited, and many are not cited at all. In *Science*, the numbers of citations that accrue to the most cited papers in the fields of Medicine, Biology, and Materials Sciences are in the thousands and tens of thousands, boosting *Science's* impact factor, independent of the lower-cited papers published in other disciplines (such as Mineralogy, Petrology, and Geochemistry, whose citation level are lower by an order of magnitude—and a level that is ironically more frequently attained in specialized geology journals).

Thus if you place your best papers in *American Mineralogist* compared to *Science*, the chances of your paper being highly cited and widely read are increased. With further reflection, this should not come as a great surprise. Specialized journals publish the more detailed scientific records that are ultimately of greater use over the long term, and are most likely to attract the attention of scientists who will actually cite a given work.

(4) You will support one of the few remaining purely society-published journals in the areas of Mineralogy, Petrology, and Geochemistry. Support for MSA is crucial as we provide a wide range of benefits:

(a) Subscription costs are *very low*. In 2014, all members will have complete online access to the journal included in their \$80 membership fee, and will continue to have a print subscription to *Elements*. These subscription costs are *vastly lower* than membership and subscription rates to flagship journals of competitive societies.

(b) Student memberships are \$20 in 2014, and come with the same subscription benefits as for professional members.

(c) We are both Open Access (author pays) and traditional (subscriber pays)—whichever option suits your needs or preferences. Our Open Access charges are also highly competitive; most importantly, whether your Open Access requirements are Gold or Green, we can accommodate those needs.

(d) Since its inception, *American Mineralogist* has waived page charges (that help the society keep subscription costs low) for authors without financial support.

(e) All electronic Supplementary Data files are Open Access, at no charge to authors. Supplementary Data files are available for free to anyone at the MSA web site, whether or not they are *American Mineralogist* subscribers or MSA members.

(f) Color is free in the online version of the journal to all MSA members.

(g) Articles published from 1916 to 1999 are freely available at the MSA web site to anyone, whether or not they are MSA members or *American Mineralogist* subscribers.

(h) *American Mineralogist* has liberal policies that allow authors to freely use their own work for teaching, presentations, and other publications, etc. Authors may also post the accepted versions of peer-reviewed manuscripts (not the journal formatted published form) on the author's personal website, discussion forums, institutional repositories or archives, or central repositories after a 12-month embargo—and we have plans in motion to help authors post-publication.

Finally, we offer personalized service, with minimal bureaucracy, and a dedication to prompt, professional reviews. In short, more good papers in *American Mineralogist* means wider circulation and more income, which means that we can keep publication costs low and provide more services to authors and readers.

Our most important goal is to provide MSA members with important and fundamental science, as well as compelling and thought-provoking reading in each issue of *American Mineralogist: An International Journal of Earth and Planetary Materials*. To achieve and maintain this goal we must have help from MSA members. It is imperative that MSA members make *American Mineralogist* their journal of first choice for publishing their very best works. The *American Mineralogist* will soon be entering its 100th year of publication. We hope to celebrate that anniversary by offering the most compelling journal available in the fields of Mineralogy, Petrology, and Geochemistry. Enjoy the benefits to MSA members in helping us to achieve this goal.

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