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## Energy Research at ACS in the Age of Open Access

ith the emergence and implementation of open access mandates such as Plan S,<sup>1</sup> we wish to highlight open access in the energy portfolio of American Chemical Society (ACS) journals via this joint Virtual Issue. Specifically, we showcase exemplar sets of high-quality and impactful open access articles published in ACS Applied Energy Materials, ACS Energy Letters, Energy & Fuels, and ACS Omega. The first three journals are traditional journals with open access options, typically termed "hybrid", whereas ACS Omega is a fully open access journal. These journals complement the recently launched fully open access journals, ACS Engineering Au (https://pubs.acs.org/ journal/aeacb3), ACS Nanoscience Au (https://pubs.acs.org/ journal/anaccx), ACS Materials Au (https://pubs.acs.org/ journal/amacgu), and ACS Physical Chemistry Au (https:// pubs.acs.org/journal/apcach), which also welcome energy research. Collectively these journals (Figure 1) cover a tremendous breadth of energy research and provide multiple options for authors based upon their topical focus, preference, or funder mandates. In this editorial, we briefly summarize the ACS energy portfolio in the context of the global open access publishing landscape for energy research. We highlight the strengths of our energy portfolio and elaborate why you should publish with us.

ACS Applied Energy Materials, ACS Energy Letters, and Energy & Fuels are all indexed under the ENERGY & FUELS category at *Journal Citation Reports* (Clarivate Analytics, 2021). This category has grown continuously between 2015 and 2019. Over this five-year time period, the growth in the number of indexed journals was 27% and in articles published was 52%. Notably, the total citations increased by 128%, with a median impact factor growth of 66% (Table 1).

# Table 1. Journal Citation Reports Data for ENERGY & FUELS (Clarivate Analytics, 2021)<sup>a</sup>

Year	Number of Journals	Number of Open Access Journals	Articles	Total Citations	Median Impact Factor
2019	112	16	45,284	1,835,725	3.294
2018	103	13	39,585	1,540,158	3.021
2017	98	10	37,362	1,290,331	2.667
2016	92	8	32,986	1,031,892	2.203
2015	88	5	29,887	805,038	1.982

<sup>*a*</sup>The number of journals includes those that cover the development, production, use, application, conversion, and management of nonrenewable (combustible) fuels (such as wood, coal, petroleum, and gas) and renewable energy sources (solar, wind, biomass, geothermal, and hydroelectric).

Surprisingly, only 16 out of the total 112 journals indexed in this ENERGY & FUELS category in 2019 are fully open access. Nonetheless, this metric is expected to change due to an explosion of new energy-focused open access journals that have been launched from various publishers in recent times. An analysis of the Directory of Open Access Journals  $(DOAJ)^2$  lists a total of 81 fully open access energy-related journals (accessed March 2, 2021). Between 2003 and 2015, only 24 journals were indexed in the DOAJ, and from 2016 to 2021, 57 journals were added—25 of which were indexed between 2019 and 2020 alone.

A recent survey commissioned by the American Chemical Society<sup>3</sup> showed that ACS authors and researchers prioritize open access options when considering where to publish but exhibit a clear preference to publish in a hybrid journal compared with a fully open access journal (Figure 2). The benefits of publishing open access have been well-debated and documented over the years.<sup>4–6</sup> Data within ACS have consistently shown that open access content attracts greater usage and a broader geographic readership. Therefore, if you have the means to publish your article "open access", we strongly encourage you to do so. Information on *how to publish open access* in ACS journals, Article Publication Charges, Read + Publish agreements, and more can be found at https://acsopenscience.org/.

The scope of ACS Applied Energy Materials, ACS Energy Letters, and Energy & Fuels (Figure 3), when coupled with ACS Omega (taxonomy filter "energy"), covers the entire gamut of energy research. While the articles presented in this Virtual issue do not necessarily reflect the entire breadth of energy topics covered in these four journals, they are fine examples of the highquality research articles, letters, reviews, and perspectives that we aim to publish. We strongly recommend that you carefully adhere to the author guidelines and consider the audience and scope of your work, its urgency, potential impact, and your funder mandate before submitting it to one of these four journals. Often, we may editorially deem that your manuscript is more suited to another journal and offer a transfer to a sister energy journal—this may occur at editorial review or after the peer-review process.

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#### "Hybrid" Journals



#### **Open Access Journals**



Figure 1. Hybrid and open access journals at ACS. The ACS portfolio of hybrid journals that focus on energy research (upper panel) or provide fully open access options to publish energy research (lower panel).



**Figure 2.** Publishing preference for ACS authors and researchers. Results from the 2020 Open Access Publishing survey<sup>3</sup> were based upon responses from 2,511 ACS authors and researchers for the question *"Would you prefer to publish in a hybrid journal, or a fully open access journal, or a subscription journal without open access options?"*.

As research-active editors, we are part of the energy community and always aim to provide rapid and fair peerreview. We will be thrilled to have your contributions published open access in our journals. We recognize that the growing number of energy journals around the world provides many options for publishing your most exciting energy-relevant breakthroughs. However, the choice of reputable and wellrecognized hybrid (ACS Applied Energy Materials, ACS Energy Letters, and Energy & Fuels) or gold open access (ACS Omega, ACS Engineering Au, ACS Nanoscience Au, ACS Materials Au, and ACS Physical Chemistry Au) options at ACS will make your scientific advance stand out.

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Figure 3. Scope of ACS Applied Energy Materials, ACS Energy Letters, and Energy & Fuels. A word cloud, where the word's size reflects the word's frequency of occurrence, was created using the three journals' scopes at https://worditout.com/word-cloud/create.

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#### Notes

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

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