Review of: "Biofuels and nanocatalysts: A Data Mining study"

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Potential competing interests: The author(s) declared that no potential competing interests exist.

The current work seeks to explore the evolutionary nuances and research hotspots in the field of biofuels and nanocatalysts. This is a very important field and the use of data mining methods is needed in this field to reveal key areas and gaps for development. The results section of the current work is very interesting and discusses some important developments in the field. However, I have few corrections and suggestions for the authors especially in their abstract, introduction, method, and conclusion. When done properly, I believe this work can be accepted for publication. For now, my recommendation is ‘minor revisions’.

-The need for a systematic review of biofuels and nanocatalysts should be emphasized in the introduction. This is missing.
-There is no literature review on the trend of biofuel production and the role of nanocatalysts. Recent studies on the subject should properly be reviewed in the introduction or as a seperate section before the methodology. The following review paper can direct the authors to some relevant papers in the field. https://doi.org/10.3390/nano12091515
-What is the novelty of this study? I suggest to authors to present some existing works on bibliometrics related to energy and fuels. From here some research gaps can be identified, and the authors can make a case of how their study adds or improves existing literature. the following research papers and others in the field could be reviewed and cited; https://doi.org/10.1007/s11356-022-20125-0; https://doi.org/10.1016/j.jclepro.2021.128871; https://doi.org/10.1016/j.jclepro.2022.130651; https://doi.org/10.1007/s11356-021-15539-1; https://doi.org/10.1007/s11356-021-17340-6
-In the method section, authors should justify why Scopus was selected for this study ahead of other databases such as WoS.
-For the keyword selection, why have authors restricted their search to generic terms? “biofuel” and “nanocat*”? The keywords used for bibliometric search should be exhaustive to accomodate all potential papers as much as possible. Why have the authors not used the names of different types of biofuels (eg biodiesel, methanol, ethanol, etc) and nanocatalysts (TiO_2, Al_2O_3,CeO_2,SiO_2,Fe_2O_3, etc) in their search? Some potential papers could have used these terms in their titles, abstract and keywords instead of the generic terms. As such some of these papers will not be captured for the analysis based only on generic terms.
-It will be nice to see a framework (figure) in the methodology section to show the steps involved in obtaining final dataset. However this is optional.

-In Figure 1, the years in the X-axis should be properly written. The commas in between the years should be removed.

-The authors need to justify some of their results. For example, what could be the possible reason for a significant rise in scientific production after 2013? Why are the most performing countries mostly dominated in Asia?

-Lumped references at the end of each paragraph in page 11 and 12 should be avoided. If possible authors should place each reference right after the sentence or word(s) they want to cite.

-Some quantitative results need to be given in the conclusion. The whole conclusion needs to be revised properly.**The conclusion should be an objective summary of the most important findings in response to the specific research question or hypothesis. A good conclusion states the principal topic, key arguments and counterpoint, and might suggest future research. It is important to understand the methodological robustness of your study design and report your findings accordingly.**