Review of: "How to search for patents on the recovery of rare earth metals from electronic waste"

Denis Prodius

Potential competing interests: No potential competing interests to declare.

The idea of the article is nice and the topic is demanded and marketable. However, in my opinion, the article by itself doesn't teach the reader about something conceptual new in "how to search for patents on the recovery of RE from e-waste" and missing the logical construction. In other words, the title could be anything non-specific to the REE recovery in e-waste and the methodology will be the same. Concluding remarks talk about other nations' need to find alternative supply routes, but the title is about "how to search patents on the recovery of REEs". Graph 4: 46 published patents for China (CN) are not comparable with 11 patents produced by AU (Austria) scientists because the number of published patents per number of habitats is different: about 1,400M (YEAR2021)/46 for CN (2021) vs. 9M (YEAR2021)/11 for AU.

Other comments: 1) use of REEs: 7% used as phosphors or in phosphors? Pr is also can be part of the magnets (up to 20 wt.%); 2) Global REE production numbers are based on the paper published 10 years ago. This is already a reason for the paper's rejection (https://www.statista.com/statistics/270277/mining-of-rare-earths-by-country/).

Conclusion: article needs complete re-writing and re-submission as a new one (or with a completely new title).