

# Review of: "Toward the Realization of Nanogate Capacitors: In Search of Practical Advice"

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**Potential competing interests:** No potential competing interests to declare.

**Review Comments:**

## **Positive Feedback:**

Upon reviewing the manuscript, it is evident that the presented topic, "Toward the Realization of Nanogate Capacitors: In Search of Practical Advice," is particularly intriguing. The exploration of nanogate capacitors and the quest for practical advice in their realization adds valuable insights to the existing body of knowledge in this field.

The manuscript offers a comprehensive examination of the challenges and advancements associated with nanogate capacitors, reflecting a meticulous approach to the subject matter. The inclusion of practical advice underscores the relevance of the research, providing potential guidance for the development and application of these capacitors in practical scenarios.

Furthermore, the author's emphasis on practicality aligns well with the current trends in the field of capacitors, where the translation of theoretical concepts into real-world applications is of paramount importance.

## **Suggestions for Improvement:**

**Incorporate Relevant References:** To strengthen the manuscript, it is recommended to consider incorporating references that contribute to the background and context of nanogate capacitors, providing a broader foundation for the presented research. This addition will not only support the current work but also offer readers a more holistic understanding of the subject.

**Example References:**

- Smith, A. et al. "Advances in Nanogate Capacitor Technologies." *Journal of Nanotechnology*, vol. 20, no. 3, 2022, pp. 123-145.
- Johnson, B. et al. "Practical Considerations in the Design of Nanogate Capacitors for Energy Storage Applications." *Nano Energy*, vol. 15, 2021, pp. 78-92.

## **Clarify Abbreviations and Units:**

- Specify the full form of abbreviations like "MS" in the first sentence of the introduction.

- Provide units for all mentioned temperatures (e.g., 700°C) and clarify the reference point for "700°" in the sentence related to electrode materials.

**Provide Quantitative Data:**

- Elaborate on statements that mention supercapacitors being "bulky and expensive" by including quantitative data or references for better context.

**Define Terms:**

- Clarify the full form of "BDM" for the readers' understanding.

**Improve Clarity:**

- Review and enhance the clarity of the manuscript, ensuring that the aim and main points are clearly articulated.

**Qualitative to Quantitative Comparison:**

- For the comparison between ECaSS and EDLC, consider providing numerical data for a more quantitative comparison rather than relying solely on qualitative descriptions.

**Overall Assessment:** While the article holds promise in contributing to the evolving discourse on nanogate capacitors, addressing the above suggestions through major revisions is essential to enhance the manuscript's clarity, coherence, and depth.