

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

Fatih Erdemir¹

¹ Karadeniz Technical University

Potential competing interests: No potential competing interests to declare.

In this paper, the authors discuss "**Toward the Realization of Nanogate Capacitors: In Search of Practical Advice**". I think this paper can be accepted with minor revisions.

- The paragraphs are poorly constructed, making the text incoherent. The spelling and punctuation should be corrected. Also, the text is insufficient to allow a clear understanding of the author's opinions.
- Some definitions are not clear and/or well-explained, leading to a misunderstanding of some aspects.
- The double-layer capacitance, which is denoted as the Helmholtz capacitance, is influenced by various factors. However, the effect of electrolyte density on it is not straightforward. Higher double-layer capacitances (C_h) can be achieved by increasing the ion density or molarity of electrolytes. Thus, the quotation below might have been wrong, or the terminology is used incorrectly.

...It turns out that the higher the density of the electrolyte (whence the smaller ϕ), the smaller the voltage V_d , and that C_d is negligible compared with C_h ...

- The atmospheric conditions are the key parameters that enable the carbonaceous materials to form carbon via calcination. The incomplete information can misguide the readers.