Review of: "SUDA energy autárkeia system"

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Potential competing interests: No potential competing interests to declare.

1. Electric Double Layer (EDL) :

- Explain the concept of the electric double layer (EDL) as discussed in the article.

- What is the significance of the Inner Helmholtz Layer (IHL) and Outer Helmholtz Layer (OHL) in the EDL ?

2. Breakdown Voltage and Capacitor Energy Density:

- How is the breakdown voltage defined in the article, and why is it important for an EDL capacitor?

- According to the article, what factors contribute to a higher energy density in an EDL capacitor?

3. ECaSS(R) - Energy Capacitor System :

- Describe the key features and components of ECaSS(R) as mentioned in the article.

- What advantages and challenges does ECaSS(R) present for compact EVs?

4. Energy Storage and Losses:

- Explain the energy storage mechanism in capacitors, especially concerning constant voltage and constant current sources.

5. Nanogate Capacitor:

- How does the energy density of the nanogate capacitor compare to that of ordinary secondary batteries ?

6. Improvements and Flexibility:

- How does the flexibility of replacing electrodes and electrolyte contribute to potential advancements in ECaSS(R) technology?