

Review of: "Internet of Things in Smart Grid: A Comprehensive Review of Opportunities, Trends, and Challenges"

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Potential competing interests: No potential competing interests to declare.

Firstly, I want to appreciate the paper that you have done, even though I have some comments to raise.

- In order to enrich the paper, it would be beneficial to incorporate a comprehensive exploration of all application areas of IoT. This should encompass domains like education and entertainment, as well as investigate the pivotal devices that drive these sectors. Such an approach not only broadens the scope of the research but also provides a holistic understanding of IoT's impact across various fields, thereby enhancing the depth and relevance of the paper's content.
- Further description on the role of IoT in the smart grid is essential to provide a robust justification. It would be advantageous to discuss the three foundational layers—sensing, network, and data processing—within the smart grid framework. Visual aids such as graphical representations can effectively illustrate the interplay and functions of these layers. This approach not only clarifies the intricate workings of IoT in the context of smart grids but also enhances comprehension by visually mapping out how each layer contributes to overall system efficiency and functionality.
- It would be advantageous to provide a detailed description of how Machine Learning (ML) and Deep Learning (DL) are applied in the context of IoT within the smart grid.
- The majority of references cited in the paper are dated and not recent. For instance, references 8, 17, 87, 97, 109, and 110 are notably older, which may affect the currency and relevance of the information presented. Updating these references with more recent sources would enhance the credibility and applicability of the research, ensuring that the paper reflects current advancements and understanding in the field. This revision is crucial for maintaining the academic rigor and ensuring that readers have access to the most up-to-date insights available.