

Review of: "Blockchain EV Payment Systems: A Systematic Literature Review in Retail Energy Trading"

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Potential competing interests: No potential competing interests to declare.

This research presents a methodical examination of the literature on blockchain technology in the electric vehicle sector, focusing on its application in retail business processes. By analyzing twenty-one relevant publications, key themes and sub-themes are identified, and their implications and potential applications are discussed. The study also proposes future research directions informed by the existing literature. The prominent themes that emerged from this investigation include blockchain features, smart contracts, and electric vehicle charging systems. The findings indicate that implementing blockchain technology in digitized electric vehicle networks has the potential to enhance operational efficiency and scalability.

The paper addresses a highly relevant and impactful research topic that has garnered significant interest from both academia and the socio-economic sector.

- 1) To enhance the motivation of the paper, it is recommended to clearly articulate the specific reasons why this research topic is significant and the potential socio-economic impact it can have. For example, emphasizing how the integration of blockchain technology into electric vehicle (EV) payment systems can improve security, transparency, and efficiency, thereby promoting widespread adoption of electric vehicles and facilitating the transition to a sustainable and greener transportation ecosystem.
- 2) It is advisable to include a dedicated section explaining the background and rationale behind utilizing blockchain technology in EV payment systems. This section should provide a comprehensive overview of the advantages and unique features of blockchain that make it a suitable candidate for enhancing EV transactions. To enhance clarity, incorporating one or two figures that illustrate the overall process of the blockchain-enabled EV payment system can greatly assist readers in understanding the concept.
- 3) In terms of the paper's structure, it would be beneficial to discuss the open challenges and existing limitations before delving into the future directions. By addressing the current obstacles and drawbacks, the authors can provide a solid foundation for proposing innovative solutions and future research directions.
- 4) Furthermore, expanding the review of related studies is essential to ensure the paper's comprehensiveness and



credibility. The authors should aim to include a more extensive range of articles, studies, and relevant literature that have investigated similar or related topics. By doing so, they can provide a more comprehensive understanding of the existing research landscape and establish the novelty and originality of their own work. The following articles should be discussed in the paper:Blockchain based data and energy trading in internet of electric vehicles; Blockchain and smart contract payment for electric vehicle charging; Privacy-preserving blockchain-based energy trading schemes for electric vehicles; Mitigating trust issues in electric vehicle charging using a blockchain; Processing electric vehicle charging transactions in a blockchain-based information system; Blockchain for Electric Vehicles Energy Trading: Requirements, Opportunities, and Challenges; Blockchain-based recommender systems: Applications, challenges and future opportunities; A blockchain-based payment and validity check system for vehicle services; EVChain: A blockchain-based credit sharing in electric vehicles charging; A consortium blockchain based energy trading scheme for Electric Vehicles in smart cities; A blockchain-based energy trading scheme for electric vehicles; EVchain: an anonymous blockchain-based system for charging-connected electric vehicles.