Review of: "Optimizing Energy Efficiency for Connected and Autonomous Electric Vehicles in the Context of Vehicle-Traffic Interaction"

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Potential competing interests: No potential competing interests to declare.

The article explores the critical challenge of enhancing the energy efficiency of connected and automated electric vehicles (CAEVs) by addressing the complex interplay between vehicle dynamics and traffic conditions. It introduces an energy-conscious optimization (ECO) approach to tackle this issue. The article is well-structured, with clear sections that cover various aspects of the problem.

Strengths:

1. The article effectively presents the challenge facing CAEVs in terms of energy efficiency and the need to optimize powertrains while considering traffic dynamics.

2. The ECO approach is well-developed and includes elements like torque tracking control, real-time sensors, and data processing algorithms, making it a comprehensive solution.

3. The article provides in-depth technical details, including equations and figures, to support the research, which adds credibility to the study.

4. The inclusion of numerous references shows a solid foundation of prior research in the field.

Areas for Improvement:

1. The abstract could benefit from briefly summarizing the key findings or outcomes of the study to provide readers with a clearer sense of its contributions.
2. Some sections, particularly Section 3, could be organized into smaller subsections to improve readability.
3. Consider adding a discussion section after presenting the results to provide more in-depth interpretation and implications of the findings.
4. Consider using more concise language in certain sections to improve readability. For example, some sentences could be shortened for clarity.
5. Be consistent in terminology and abbreviations. Ensure that you use the same terms and abbreviations consistently throughout the article.

Overall, the article presents a valuable contribution to the field of CAEV optimization. With a few enhancements in abstract clarity and section organization, it can further improve its accessibility and impact.