

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 author has explored the intricate relationship between vehicle dynamics and traffic conditions, shedding light on their significant influence on the operational efficiency of connected and automated electric vehicles (CAEVs). This research introduces an energy-conscious optimization (ECO) approach aimed at enhancing the energy efficiency of CAEVs. This enhancement is achieved through a systematic addressing of the dynamic constraints posed by the traffic environment and the inherent limitations of the vehicle's powertrain, all within a unified framework.

To construct the ECO approach, an innovative bias deep compensative estimator is introduced. This estimator's primary function is to identify crucial parameters within the vehicle dynamics model. Once these parameters are identified, they play a central role in translating the constraints stemming from the traffic environment into corresponding powertrain constraints that are specifically tailored for CAEVs.

Nonetheless, it is incumbent upon the author to provide a comprehensive explanation of the insights derived from each equation presented in the study. Furthermore, it is crucial for the author to elucidate the distinct contributions that each equation makes to the modeling of the intricate dynamics of CAEVs.

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