

Advanced Simulation of Power Consumption of Electric Vehicles

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Abstract : Electric vehicles are one of the most complicated electric devices to simulate due to the significant number of different processes involved in electrical structure of it. There are concurrent processes of energy consumption and generation with different onboard systems, which make simulation tasks more complicated to perform. More accurate simulation on energy consumption can provide a better understanding of all energy management for electric transport. As a result of all those processes, electric transport can allow for a more sustainable future and become more convenient in relation to the distance range and recharging time. This paper discusses the problems of energy consumption simulations for electric vehicles using different software packages to provide ideas on how to make this process more precise, which can help engineers create better energy management strategies for electric vehicles.

Keywords : electric vehicles, EV, power consumption, power management, simulation

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