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演題名	Study of Numerical Modeling of Electric Vehicle for Improvement Method of Energy Efficiency
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内容	Nowadays, the world has to deal with three matters such as air pollution, global warming, and the energy crisis. Concerning global warming, to reduce the harmful effect of climate change, COP26 (2021) agreed to maintain the Earth's temperature rise below 1.5°C, and to achieve it, the realization of Carbon Neutral in 2050 is necessary, and one of the ways is the CO2 reduction in the transportation sector such as automobiles. Passenger cars are shifting from ICE Vehicles to BEV (Battery-Electric Vehicles), intending to become carbon-neutral by 2050. In a previous study, we proposed a fuel efficiency improvement method for gasoline vehicles and HEV (Hybrid Electric Vehicles) on real roads using vehicle numerical modeling and traffic flow simulations (SUMO). In this study, concerning the range of the BEV that will not have enough battery charge to reach their destination, we created a vehicle numerical modeling using Matlab based on the real vehicle used in test cycles and real driving tests. By using the test cycles and real driving test vehicle speed data from the experiment, the simulation is run. Energy consumption results from the simulation will be investigated and analyzed.