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(57) Abstract :

The manufacturing of transportation vehicles powered by fossil fuels must be decreased for a cleaner environment. Technology advancements are intended to make battery electric vehicles more affordable to produce than traditional ones. For safer operation of electric vehicles over the course of their lives, an effective battery cooling system is required. An electric vehicle's battery cooling system has been combined with the air conditioning system. Because of the higher intrinsic properties of the nanoparticles themselves, the motion of the nanoparticles in the fluid, or other particle-fluid interactions, like the formation of an interfacial layer or nanolayer, it has been discovered that nanofluids exhibit effective thermophysical properties greater than the base fluid.

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