

A technology of vibration power generation and energy storage system, applied in current collectors, electromechanical devices, electric vehicles, etc., can solve the problems ...

The driving motivation behind this paper is to present the state of the art of vibration energy harvesting technology in the field of rail transit and its related research points, including rail ...

Abstract As the demand for clean and sustainable energy increases, it is useful to explore alternative energy strategies, including harvesting the kinetic energy of vibration. In ...

In urban rail vehicle operations, the supercapacitor box is critical in the energy storage and power supply system. Despite considerable research on the fatigue characteristics ...

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Research on the creative use of kinetic energy in transport infrastructures has been directed by the constant search for sustainable energy solutions. Of them, railway tracks provide a ...

Summary The safe and stable operation of the widely distributed freight trains urgently needs to solve the power supply problem of the freight train track monitoring network. In this article, an ...

In this paper, we review, compare, and analyze previous studies on vibration energy harvesting and related technologies. First, the paper introduces the basic aspects of vibration energy ...

