

Removing energy with an exoskeleton reduces the metabolic cost of walking

Michael Shepertycky, Sarah Burton, Andrew Dickson, Yan-Fei Liu and Qingguo Li

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Store energy and save energy

Many devices have been developed to harvest energy from walking or running, but their use often comes at cost to the wearer in the form of increased metabolic demand. Shepertycky *et al.* designed a device that can harvest mechanical energy from a natural walking gait and convert it to useable electrical energy while also reducing the metabolic energy consumption of the user (see the Perspective by Riemer *et al.*). The key to achieving "something from nothing" comes from designing the device to use muscle-centric control of the knee exoskeleton resistance to reduce active muscle force during the late part of the leg swing cycle.

Science, aba9947, this issue p. 957; see also abh4007, p. 909

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