



Flywheel Energy Storage

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submissions:

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Message from the Guest Editor

Dear Colleagues,

Flywheel Energy Storage Systems (FESS) convert electricity to kinetic energy, and vice versa; thus, they can be used for energy storage. High technology devices that directly use mechanical energy are currently in development, thus this scientific field is among the hottest, not only for mobile, but also for stationary applications. Precisely, FESS have a wide range of applications in transportation (especially in race cars), uninterruptable power supply (UPS) systems, off-grid electricity production and many others. Usually, magnetic bearings are used to reduce friction losses. The advantages of FESS, when compared with conventional storage technologies, such as batteries, are the limited maintenance needs, high round-trip efficiency, high-power density, long lifetime, and, mainly, their negligible environmental impact. We, therefore invite contributions on topics that include (but are not limited to):

- FESS design and operation
- Off-grid electricity production
- Mobile applications of FESS
- Materials used for FESS implementation

I look forward to your contributions,

Prof. Frank A. Coutelieris

Guest Editor





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Message from the Editor-in-Chief

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