

Special Issue

Supercapacitor Energy Storage Systems: Technology, Performance and Applications

Message from the Guest Editor

There have been many studies indicating that supercapacitor energy storage could be used to advantage in electric and hybrid vehicles. Supercapacitors can be used alone or in combination with batteries to improve the powertrain efficiency and/or to increase the cycle life and reduce the cost of the batteries. The automobile industry has shown minimal interest in using supercapacitors, even in their advanced, high efficiency, alternative fuel vehicles. The reasons given for not using supercapacitors are their relatively low energy density and the high cost of the supercapacitors and the interface electronics needed to control the power as the capacitor voltage decreases in discharge. This Special Issue will address topics of special interest for vehicle applications of supercapacitors with particular attention to those cited by the auto industry as reasons for rejecting them as components in electric and hybrid vehicle powertrains.

Guest Editor

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As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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