Special Issue

Smart and Sustainable EV Charging Infrastructure

Message from the Guest Editors

Most of us are aware of the rising concerns due to global warming, the energy crisis, and environmental pollution that have initiated the decarbonization movement. As per the International Energy Agency (IEA), the transportation sector is still responsible for 24% of direct CO2 emissions due to fossil fuel combustion. Given the urgent need for the transportation sector decarbonization, thoughts of electrification have been initiated and led to the development of electric vehicles (EVs). The paradigm shift from internal combustion engine (ICE)-driven vehicles to EVs calls for the development of smart and sustainable charging infrastructure. Uncoordinated charging may result in serious consequences such as voltage stability, power losses, degradation of reliability indices, and increase in the peak load. At the same time, ensuring energy sustainability, the development of the renewable-based charging infrastructure, and an increase in the share of renewables in the national energy mix is given priority. Hence, planning smart and sustainable EV charging infrastructure and coordinating the charging activities are prime concerns for researchers.

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I encourage you to contribute a research or comprehensive review article for consideration for publication in *Sustainability*, an international Open Access journal which provides an advanced forum for research findings in areas related to sustainability and sustainable development. *Sustainability* publishes original research articles, review articles and communications. I am confident you will find the journal contributes to enhancing understanding of sustainability and fostering initiatives and applications of sustainability-based measures and activities.

Editor-in-Chief

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