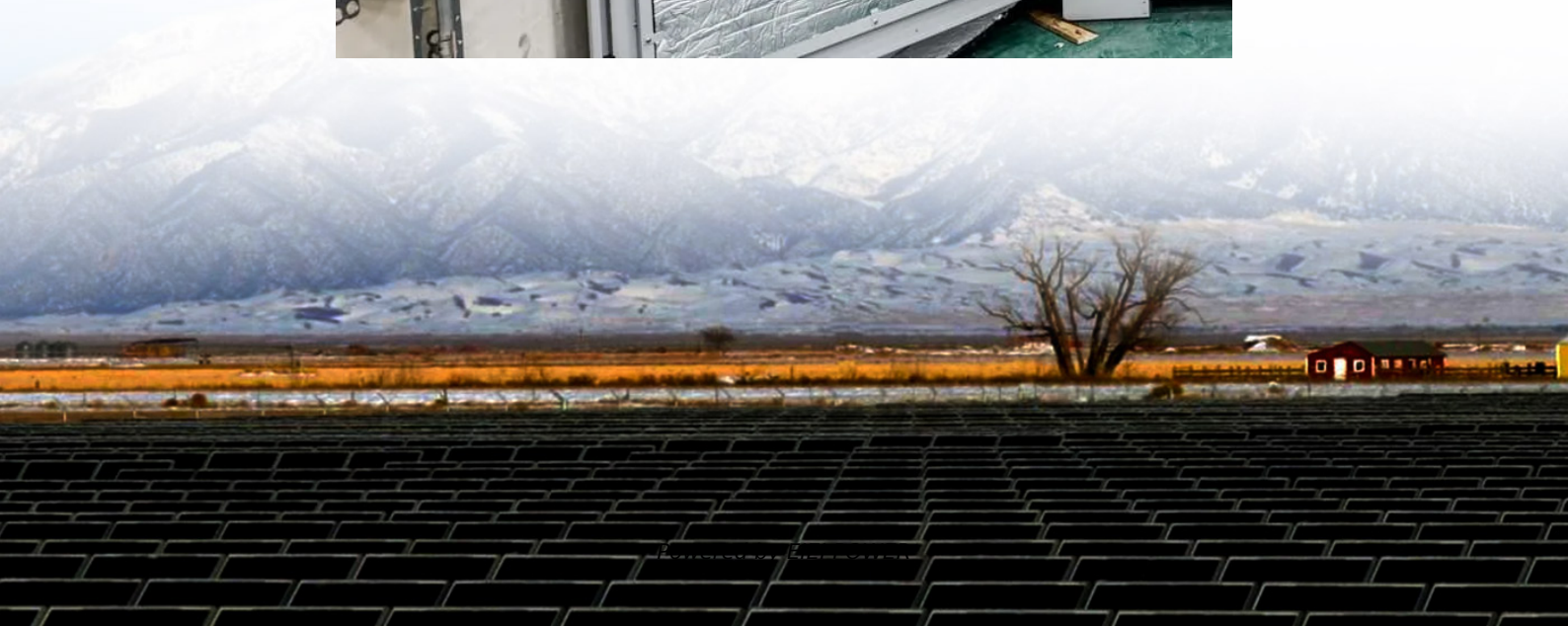


Perovskite solar container battery





Overview

Are perovskite solar cells sustainable?

Perovskite solar cells (PSCs)-integrated solar-rechargeable batteries are also discussed from the perspective of sustainable development; these batteries capture solar energy into batteries and convert to storable chemical energy in batteries.

Can next-generation solar cells lead to perovskite-based materials and devices?

The breakthrough in 2012 showed how next-generation solar cells lead to perovskite-based materials and devices. Perovskite solar cells (PSCs) have achieved power conversion efficiency (PCE) $\sim 26.1\%$ on rigid and $\sim 25.09\%$ on flexible substrates. The long lifetime of ~ 8760 h is reported for PSCs using Pb-based perovskites as an absorber.

Can a perovskite-type battery be used in a photovoltaic cell?

The use of complex metal oxides of the perovskite-type in batteries and photovoltaic cells has attracted considerable attention.

Are Pb-free perovskite materials useful for solar cells?

Hence, herein, a review of the present status of Pb-free perovskite materials and related solar cell devices will be discussed. Further, the review will summarize the recent developments in perovskite materials free from lead and useful for solar cells.



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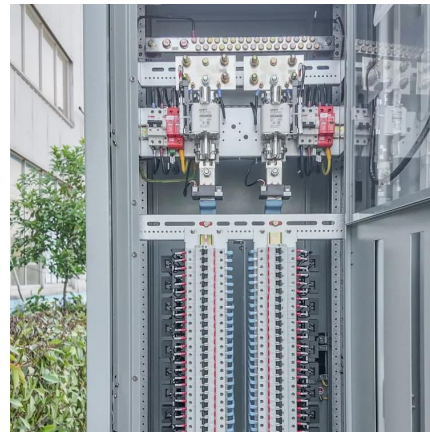
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