Special Issue

Recycling of Crystalline Silicon Solar Cells

Message from the Guest Editor

Photovoltaic technology is used worldwide to provide reliable and cost-effective electricity for industrial, commercial, residential, and community applications. The average lifetime of PV modules can be expected to be more than 25 years. The disposal of photovoltaic modules has emerged as a problem, considering the still increasing production of PV modules. Recovering valuable materials, especially pure silicon, from damaged or end-of-life PV modules can lead to economic and environmental benefits. The recycling of solar panels is complicated because of the decades-long interval between installing and discarding modules, different production technology, and their geographical dispersion. Environmental regulations can determine the cost and complexity of dealing with end-of-life photovoltaic modules. If they are classified as hazardous, then special requirements for material handling, disposal, record-keeping, and reporting will escalate the cost of module decommissioning.

Guest Editor

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