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

Prof. Ewa Klugmann-Radziemska
Gdańsk University of Technology, Faculty of Chemistry, Department of Energy Conversion and Storage, Gdańsk, Poland

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Materials
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
materials@mdpi.com

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1. Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada
2. Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

Prof. Dr. Yuguang Ma
State Key Laboratory of Luminescent Materials and Devices, South China University of Technology, Guangzhou 510640, China

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