Special Issue

Solar Cells and Modules: Fabrication, Characterization, and Environmental Issues

Message from the Guest Editor

At present, almost 600 GW of solar modules are installed worldwide. This power corresponds to an area of around 4000 km^2. The installed area is increasing daily by about three soccer fields, a number which, in terms of the total power and area, increases exponentially. The production cost of photovoltaic electricity ranges around a few ct/kWh and is lower than the cost of electricity from coal or nuclear power plants. Thus, the road to an environmentally friendly supply with electricity has been paved. Nevertheless, this success is accompanied by dynamic growth and creates certain problems. For example, some of the cell and module technologies contain toxic materials, such as lead and cadmium. These materials could leach out of the modules. Additionally, some modules degrade in electrical power.

Guest Editor

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Deadline for manuscript submissions

closed (20 March 2021)

Energies

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 7.3

mdpi.com/si/35870

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Energies is an international, open access journal in energy engineering and research. The journal publishes original papers, review articles, technical notes, and letters. Authors are encouraged to submit manuscripts which bridge the gaps between research, development and implementation. The journal provides a forum for information on research, innovation, and demonstration in the areas of energy conversion and conservation, the optimal use of energy resources, optimization of energy processes, mitigation of environmental pollutants, and sustainable energy systems.

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