Special Issue

Greenhouse Integrated Photovoltaic System

Message from the Guest Editor

Consumers demand sustainable agricultural products that are respectful of the environment and of the workers who obtain them. Many crops (ornamental, vegetables and fruit, mainly) are developed in different types of greenhouses depending on the country where they are located. This fact requires the use of renewable energies (hydro, wind, geothermal, biomass and solar). The integration of photovoltaic systems in greenhouse crops is a reality. Covers, irrigation systems, automata, mechanisms, machinery, ventilation, cooling, heating, etc., need energy for their operation. The adaptation of different photovoltaic systems to each type of crop, type of greenhouse and location, requires precise studies to guarantee its technical and economic viability.

Keywords: Greenhouse crops and solar panels; Solar photovoltaic greenhouses; Photovoltaic irrigation systems; Solar radiation distribution in photovoltaic greenhouses; Greenhouse roof for energy; Photovoltaic systems in agriculture; Other photovoltaic systems.

Guest Editor

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As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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