Special Issue

Solar Absorber Coatings for Thermal Applications

Message from the Guest Editor

Coatings used as absorbers are one of the main responsible of the optical and thermal efficiency of the solar thermal systems. They collect the sun energy and transform it into heat. A multilayer structure is necessary to achieve a wavelength selectivity. The appropriate design of each film makes possible to satisfy a high value of absorptance in the solar wavelength range and a low value of thermal emittance in the mid/far infrared wavelength ranges. Furthermore, depending on the working temperature in the solar systems, the solar absorber coatings has to satisfy different conditions which means different requirements in terms of properties and durability. The purpose of this Special Issue is to collect interesting and original studies about materials used as solar thermal absorbers including topics concerning material engineering, manufacturing technology, theoretical analysis, characterization, durability and definitively, any matter related to the solar absorbers which contributes to improve the solar thermal conversion efficiency and to reduce the technology costs.

Guest Editor

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Message from the Editor-in-Chief

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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