Special Issue

Properties of Thin-Film Semiconductors and Their Applications in Photovoltaics

Message from the Guest Editor

photovoltaic energy is a clean and promising source of energy around the globe. A more popular way that it is distributed is through the application of silicon wafers. However, these wafers present some limitations, such as efficiency, which has not greatly improved in the last decade, and a high manufacturing cost. Thin-film technology is a response to the search for a more efficient and low-cost form of photovoltaic energy. Its many advantages include an abundant number of materials. Additionally, these films can be synthesized through different routes and other forms of deposition that have been researched and optimized by many bodies of research in many countries. This Special Issue will cover topics including new technologies of deposition and the growth of thin films on substrates; the characterization of different thin films applied for photovoltaic solar cells; the heterojunction of new materials to absorb light; cost analyses for production and manufacturing; doping of the film structure; and simulation of the performance and data of the thin films. The main goal is to expand this research and to connect the many faculties that are working on this issue.

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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