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EDITORIAL

Featured issue: Electronic materials for solar energy generation and energy storage

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In this second Featured Issue of 2013 we are highlighting another field of particular current interest in our discipline—Materials for Solar Energy Generation and Energy Storage.

The stimulation for such a large research effort in the solar energy field has been the international concern about the environmental effects of using fossil fuels, and the consequent move to alternative and sustainable forms of energy. Solar energy generation is an important element in this move, and has led to research on a wide variety of materials and systems, while the storage of such energy is equally important in maintaining a stable energy supply.

In this issue we include research on developments in silicon for solar cells, still the overwhelming material of choice in this industry, and this includes a paper on the novel 'black silicon'. The use of TiO_2 in dye-sensitised solar cells (DSSC's) attracts a number of papers, as does research on chalcogenide materials including CIGS and CZTS, which are both of very active interest. Reflecting another modern development, we include papers on all-polymer and hybrid polymer solar cells, together with a number of more specialised papers.

Our section on electronic materials for energy storage reflects the active research on solid-state batteries, with the necessary electrochemical parameters involved. The discovery of supercapacitors, with their potential in energy storage, is reflected in other papers.

The active interest in these vital topics has led to this issue from papers submitted as regular papers. We hope that you will find this issue of interest, and that it will help to guide further work on these important topics.

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