

Editorial

Scanning tunneling microscopy (STM) is a non-optical microscope, useful for surface science studies. Researchers use this technique to study the charge transport mechanisms in molecules, surface domain formations in self-assembled monolayers and Langmuir-Blodgett films, defect sites in molecules and substrates, and so forth. It has been used extensively to study the defects and physical structure of synthetic nano materials and interfaces at nano level. It is considered as an important tool for nano research. Here in this volume, we have an interesting article, where the author used STM technique to study the semiconductor carbon nanotube- substrate interface layer. Using STM, it was also possible to reveal that the carbon nanotubes and metal interface layer has mixed quantum mechanical state wave functions.

This multi-disciplinary volume has second article on thin film solar cell, here, the author studied the possibility of a buffer layer of carbon nanotubes in CdS and Cu(In,Ga)Se₂ thin film solar cells. This can increase the cell efficiency. Third article is on the numerical analysis of nanostructured TiO₂/Cu₂ZnSnS₄ based PV solar cell. Forth article is on controlled release of herbicides; control release is important for environmental care. Normally, layered double hydroxides (LDHs) have been used in controlled release formulation of antioxidant compound, and different drugs. They intercalated 3-(4-methoxypheny) propionate (MPP) into the Zn/Al layered double hydroxide (LDH) by ion-exchange method and studied the control the release of 3-(4-methoxypheny) propionate. Last article is on green synthesis of silver nano particles. Author used Rooibos tea extract for this and eventually grown Ag nano partials of uniform size and shape. By the way, Rooibos is a very common herbal tea in the Southern African reason, I remember, I use to take every day during my stay in Cape Town.

We are in the 8th volume now and slowly rising to a prospective journal. We would like to thank all the contributing authors, reviewers for their trust and constant support.