



Maple prepared organic heterostructures for photovoltaic applications

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Résumé en anglais	<p>In this study, we present the deposition of ZnPc, Alq3, and PTCDA thin films using Matrix Assisted Pulsed Laser Evaporation (MAPLE) technique. We also report the realisation of multilayer structures, made by the successive application of MAPLE. The films have been characterized by spectroscopic (UV-VIS and Photoluminescence) and microscopic (SEM and AFM) methods, and the effect of different deposition conditions such as fluence, number of pulses, and target concentration on the properties has been analysed. This paper also presents some investigations on the electrical conduction in sandwich type structures ITO or Si/organic layer/Au or Cu and ITO/double organic layer/Cu, emphasising the dominant effect of the height of the energetic barriers at the inorganic/organic and organic/organic interfaces.</p>
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