



Appunti di Fisica '19 & Dottorato di Ricerca in Fisica

**5 dicembre ore 15:00
aula HT3-1
(primo piano Incubatore d'Impresa)**

Lights & shadows of dye-sensitized solar cells

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The recent state of the art of solar devices based on dye-sensitive solar cells (DSSC) will be reviewed. Their design, manufacture and characteristics will be discussed in depth. Here also are analysed the recent advances in the exploitation of natural sensitizers for the conversion of solar energy, comparing them with the synthetic ones. Furthermore, it is provided an in-depth discussion on the main limitation of the use of DSSCs, outlining future developments for their use in large modules, and on some technological solutions which can favour the progress of their integration into living environments and/or in building facades. Finally, I present my point of view on the future prospects of DSSCs also in the field of solar painting art.

<http://sites.google.com/site/AppuntiDiFisicaMessina/>