# 유-무기 하이브리드 태양전지

임상혁*
경희대학교
(imromy@kaist.ac.kr*)

Recently, the inorganic semiconductors or quantum dots have been considered as a promising candidate for replacing conventional Ru-dyes owing to their unique properties such as convenient bandgap tailoring by size control, easy chare separation by intrinsically larger dipole moment, availability to thin-film due to strong absorption coefficient, multiple exciton generation, good stability and solution processibility. Hence metal chalcogenides including CdS(e), PbS(e), and Sb2S3 have been intensively studied to develop very efficient solar cells. Among them, I have studied on the Sb2S3 inorganic semiconductor-sensitizer owing to its excellent optical properties such as high absorption coefficient at visible region and suitable band gap. Here I would like to introduce recent trend of inorganic semiconductors-sensitized solar cells and share recent research activities.