

Nano-embedded high performance non-toxic solar cell

ABSTRACT

Dye-sensitized solar cell (DSSC) is a new type of solar cell that is environmentally friendly and proven clean that can bring advantages for photovoltaic technology development. The optimization of photoanode layer is fundamental for conversion of visible light-irradiation into electricity in DSSC device. In this investigation, nanoflowers structure of TiO₂-Ag embedded with SrSnO₃ is employed as a photoanode layer of DSSC by using hydrothermal technique and RF sputtering to create a larger surface area for anchoring dye.