

Abstract

A dye-sensitized semiconductor layer 3, a porous insulating layer 4 and a counter electrode 5 are laminated in order on a transparent conductive layer 2 formed on a transparent substrate 1, thereby structuring a dye-sensitized photoelectric conversion element. The counter electrode 5 is formed from a foil made of either a metal or an alloy having a catalyst layer on a side of one surface of the porous insulating layer 4, or from a foil made of a material having a catalytic ability. The transparent conductive layer 2 of one dye-sensitized photoelectric conversion element, and the counter electrode 5 of the other dye-sensitized photoelectric conversion element are electrically connected to each other in a portion between the two dye-sensitized photoelectric conversion elements adjacent to each other. The dye-sensitized semiconductor layer 3 and the porous insulating layer 4 are impregnated with an electrolyte. Each of the dye-sensitized photoelectric conversion elements is covered with a sealing layer 7.