

The invention relates to solar radiation-to-electric energy conversion technique, in particular to the design of contacts and the chemical composition of materials used in the manufacture of conductive and semiconductor elements of the photoelectric converter.

The semiconductor photoconverter includes a semiconductor plate, on the back surface of which is applied a solder layer, and on the front work surface are applied metal current-collecting contacts and a layer of organosilicon adhesive. As semiconductor are used silicon or germanium nanocrystals with a part of the crystallographic planes oriented in one direction, and as an orientation instrument is used an electrostatic field source with adjustable intensity. To control the current intensity in the load is used a milli- or microammeter. At the same time the tin-lead solder additionally contains antimony in an amount of 3 ...4% of the alloy weight. The current-collecting contacts are made of iron-cobalt or iron-cadmium galvanic alloy. The protective coating is applied on all surfaces of the photoconverter in the form of a layer of organosilicon adhesive.

The technical result of the invention is to improve the energy efficiency of the photoconverter.

Claims: 5

Fig.: 2