

Title: Zinc telluride solar glass

Generated on: 2026-02-19 11:03:47

Copyright (C) 2026 HALKIDIKI BESS. All rights reserved.

Why is zinc telluride used in optoelectronics?

Zinc telluride can be easily doped, and for this reason it is one of the more common semiconducting materials used in optoelectronics. ZnTe is important for development of various semiconductor devices, including blue LEDs, laser diodes, solar cells, and components of microwave generators.

What is zinc telluride?

Zinc telluride is a binary chemical compound with the formula ZnTe. This solid is a semiconductor material with a direct band gap of 2.26 eV. It is usually a p-type semiconductor. Its crystal structure is cubic, like that for sphalerite and diamond.

What is the unit cell of a zinc telluride crystal?

The unit cell of a zinc telluride crystal. Except where otherwise noted, data are given for materials in their standard state (at 25 °C [77 °F], 100 kPa). Zinc telluride is a binary chemical compound with the formula ZnTe. This solid is a semiconductor material with a direct band gap of 2.26 eV. It is usually a p-type semiconductor.

What happens if a zinc telluride crystal is exposed to terahertz radiation?

Conversely, subjecting a zinc telluride crystal to terahertz radiation causes it to show optical birefringence and change the polarization of a transmitting light, making it an electro-optic detector.

A first aspect of the present invention provides cover glass for a solar cell, the cover glass comprising: a glass substrate including a surface; and a transparent protective film containing ...

A new approach is adopted to grow cadmium zinc telluride (CdZnTe) thin films using the close spaced sublimation (CSS) technique. ...

Cadmium Zinc Telluride is a compound semiconductor with remarkable properties that lend themselves well to the production of solar ...

The novelty of this research is to direct synthesis using thiol-amine co-solvent and deposit ZnTe thin films on glass substrates via simple, easy, and inexpensive spin coating ...

A new approach is adopted to grow cadmium zinc telluride (CdZnTe) thin films using the close spaced sublimation (CSS) technique. The deposition parameters for the ...

With the bottom cell being CIGS which have already demonstrated the required efficiencies, this work aims to study the complete fabrication and performance of Cd_{1-x}Zn_xTe solar cells with a ...

With some lattice mismatch, it can also be grown on other substrates such as GaAs, [4] and it can be grown in thin-film polycrystalline (or nanocrystalline) form on substrates such as glass, for ...

Unlike conventional silicon panels that use thick layers of silicon, these solar cells use a simpler, less expensive approach -- ...

Website: <https://www.halkidiki-sarti.eu>

