

Quiz 9

Name:

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Question 1

Can there be light absorption below the optical gap for amorphous semiconductors? What is responsible for this?

Yes, there can be weak absorption from the Urbach tail, related to energetic disorder (e.g. defects).

Question 2

How does charge separation occurs in third-generation solar cells?

- ☐ Through diffusion
- ☒ Through the presence of an interface
- ☐ Through drift

Question 3

What is the main purpose of a p-n junction in a solar cell?

Separating the photo-generated charge carriers by means of a static field: the junction sweeps electrons to the n-side and holes to the p-side.