

Semiconductors Structure Lesson

Structure



The arrangement of the atoms in a solid is broken down into three classifications: amorphous, polycrystalline, or crystalline. Silicon is the most common semiconductor material being used today because it is the most abundant and can be found in all three arrangements.

The most common and cheapest arrangement is amorphous, which has no recognizable long-range order. The most common in devices and the most expensive arrangement is crystalline, where you can look at any given section of the material and you will find the same arrangement in another section. Polycrystalline semiconductors are in between, they have crystalline parts that are not aligned with respect to one another.