

الاسم واللقب: الفوج:

I- Fill in each gap with one word:

trivalent / other / increased / properties / more / decreases / metal / doping / light / opposite

A semiconductor material has an electrical conductivity value falling between that of a conductor – such as copper, gold etc. – and an insulator, such as glass. Their resistanceas their temperature increases, which is behaviorto that of a

Semiconductor devices can display a range of usefulsuch as passing currenteasily in one direction than the showing variable resistance, and sensitivity to or heat. Because the electrical properties of a semiconductor material can be modified by or by the application of electrical fields or light. The conductivity of silicon isby adding a small amount of pentavalent (antimony, phosphorus, or arsenic) or (boron, gallium, indium) atoms. This process is known as doping and resulting semiconductors are known as doped or extrinsic semiconductors.

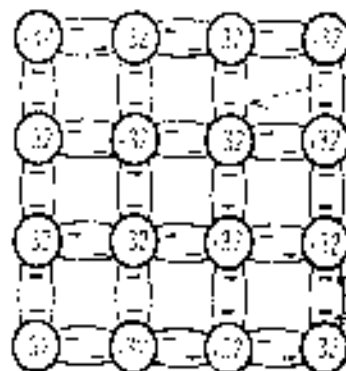
II- Answer the following questions:

- 1- Why are impurities added to compounds?
.....
- 2- When we can write the abstract of a lab report?
.....
- 3- Is't right that the abstract is "a lab report in miniature" ?
.....
- 4- What is the purpose of a lab report?
.....
- 5- What are the characteristics of semiconductors ?
.....

III- Translate from English into Arabic:

Photovoltaic devices generate electricity directly from sunlight via an electronic process that occurs naturally in certain types of material, called semiconductors. Electrons in these materials are freed by solar energy and can be induced to travel through an electrical circuit, powering electrical devices or sending electricity to the grid. Sunlight is composed of photons, or "packets" of energy. These photons contain various amounts of energy corresponding to the different wavelengths of light.

IV-complete and answer:



- 1-How many germanium atoms show this diagram? how many of them are stable? mention them on the figure
.....
- 2- A continuous atomic structure is known as

الترجمة:

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Good Luck Bonne Chance حظ سعيد

السنة الأولى
المادة: فيزياء

التحضير: الدكتور محمد لافي
الكلية: الهندسة

التاريخ
2019/2020

I -

decreased - opposite - metal. properties - more
other - light - doping - increased - trivalent,

II -

- 1 - To modify the properties of SiC.
- 2 - Only after the rest of the report is written.
- 3 - Yes.
- 4 - The purpose is what you are trying to do.
- 5 - SiC is a material whose atoms are half-filled.

III 1 - Covalent bonds - Electron pairs
- 16 germanium atoms, four (4) of them
only are stable.
2 - Crystal lattice.