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Assignment 0

The due date for submitting this assignment has passed.

As per our records you have not submitted this **Due on 2019-02-04, 23:59 IST.**
assignment.

1) The label of the highest order axis of rotation for a hexagonal close packed crystal is **1 point**

- C₃
 C₆
 S₃
 S₆

No, the answer is incorrect.

Score: 0

Accepted Answers:

C₆

2) A compound that typically crystallizes in a perovskite structure is **1 point**

- SrTiO₃
 MgAl₂O₄
 LiNbO₃
 Mg₂SiO₄

No, the answer is incorrect.

Score: 0

Accepted Answers:

SrTiO₃

3) The enthalpy of formation of Frenkel defects in AgCl (Molar Mass = 143 g/mol) is 1.35 eV at **1 point**
300 K. The number of Frenkel defects in 1 ng (nano gram) of AgCl is (closest to)

- 20
 2000
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Week 8 : X-ray
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Week 12 :
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4) The Bloch theorem assumes that the Bloch electrons are :

1 point

- do not feel the effect of the crystal structure
- do not feel the effect of interaction with each other
- fixed to an atom
- free electrons within the 3D crystal

No, the answer is incorrect.

Score: 0

Accepted Answers:

do not feel the effect of interaction with each other

5) The group notation for a monatomic fcc crystal in the Hermann - Mauguin convention is

1 point

- P3m
- Fmmm
- Fm-3m
- None of the above

No, the answer is incorrect.

Score: 0

Accepted Answers:

Fm-3m

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