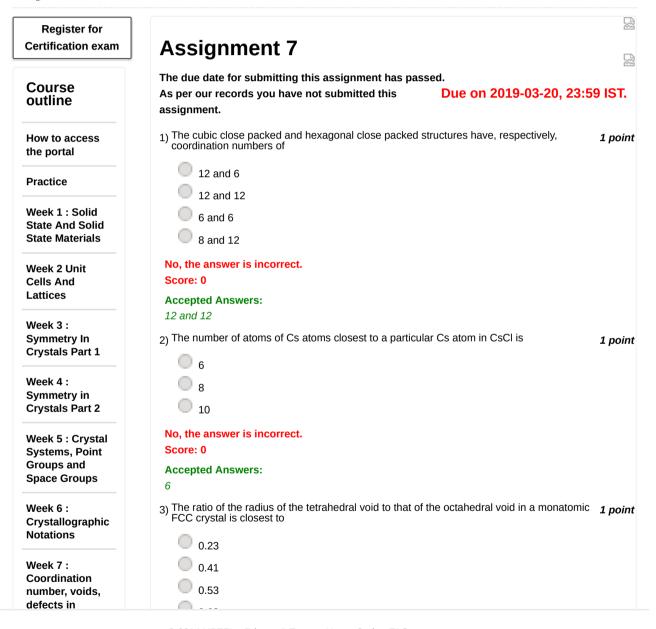
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Courses » Solid State Chemistry Announcements Course Ask a Question Progress FAQ

Unit 9 - Week 7 : Coordination number, voids, defects in crystals



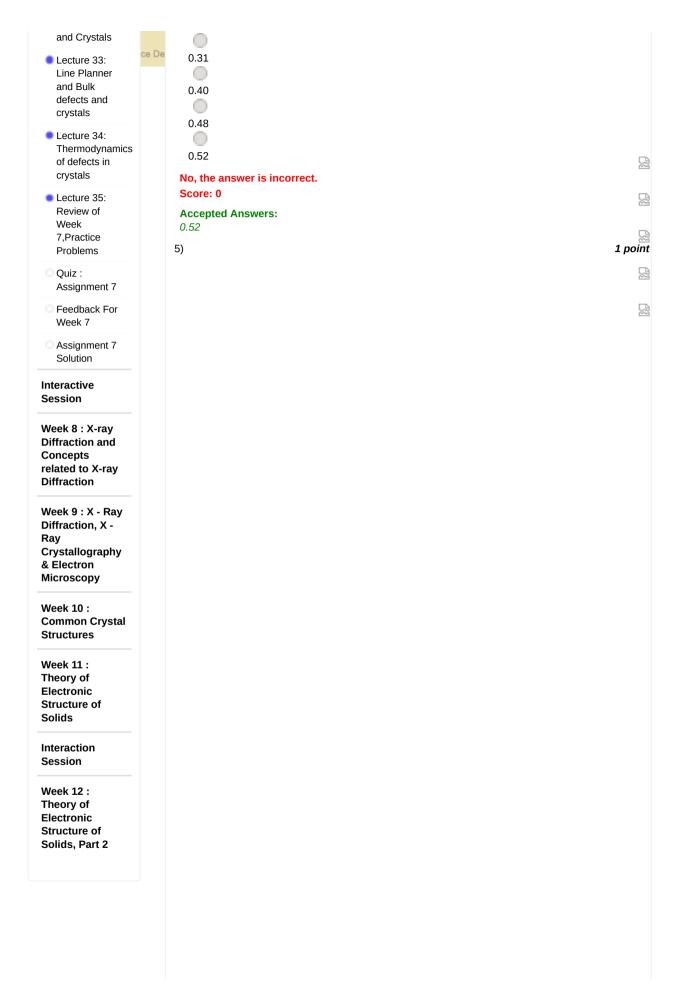
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The octahedral void in a perfect monatomic bcc lattice is	
a distorted octahedral void located at the face centers of the cube	
a perfect octahedral void located at the face centers of the cube	
a distorted octahedral void located at the edge centers of the cube	
a perfect octahedral void located at the edge centers of the cube	
No, the answer is incorrect.	,
Score: 0	C/M
Accepted Answers: a distorted octahedral void located at the face centers of the cube	
6) Of the following defects, the one that is a planar defect is a	1 point
	<u>~~~</u>
screw dislocation	
edge dislocation	
disclination	
grain boundary	
No, the answer is incorrect. Score: 0	
Accepted Answers: grain boundary	
7) The defects that lead to plastic deformation of materials are	1 point
voids	
disclinations	
dislocations	
grain boundaries	
No, the answer is incorrect.	
Score: 0	
Accepted Answers: dislocations	
8) The number of states of a system with N particles having m noninteracting vacancies is	1 point
N!	
$\frac{N!}{m!}$	
$\frac{N!}{m!(N-m)!}$	
None of the above choices	
No, the answer is incorrect.	
Score: 0	
Accepted Answers:	

$\frac{N!}{m!(N-m)!}$	
9) The enthalpy of Schottky defect formation in LiBr is 1.86 eV and that of Frenkel defects in AgCl is 1.54 eV. Let f_{LiBr} and f_{AgCl} denote the fraction of defects at 500K to that at	1 point
300K. The value of f_{LiBr}/f_{AgCl} is closest to	
1003	
1.2	
59.4	200
11.2	
No, the answer is incorrect. Score: 0	
Accepted Answers:	
11.2	Ç.
10)The enthalpy of Schottky defect formation in MgO is 6.60 eV. The natural logarithm of the	1 point
ratio of the number of defects at 1000K to that at 300K is closest to	
<u> </u>	
43	
88	
546	
No, the answer is incorrect.	
Score: 0	
Accepted Answers: 88	