

CHEMISTRY

Periodic Properties

Ionisation Energy

21. (4)
22. (3)
23. (2)
24. (3)
25. (2)
26. (2)
27. (4)
28. (2)

High jump between IE_4 and IE_5

Therefore, number of valence = 4

General configuration ns^2np^2

Therefore element = Si

29. (4)

For lower value of n , Z_{eff} is high therefore

IE required will also be high.

30. (1)

Cu	Ag	Au
$3d^{10}4s^1$	$3d^{10}5s^1$	$4f^{14}5d^{10}6s^1$

In Au, poor screening is provided by 4f subshell electron.

$\therefore Z_{\text{eff}}$ increases and ionisation energy also increases.

$\therefore Au > Cu > Ag$ is correct order.