Answer on Question #56200 - Chemistry - General chemistry

Question:

6. Arrange the 2nd period atoms in decreasing order of first ionization energy.

(Li, Be, B, C, N, O, F, Ar)

7. Arrange the 2nd period atoms in increasing order of electron affinity.

(Li, Be, B, C, N, O, F, Ar)

8. Write the condensed electron configuration for the following ion:

(a) Zn2+ _____

(b) Se2- _____

(c) Co2+ _____

(d) Ti+ _____

(e) Mn3+ _____

(f) Sn2+ _____

Solution:

6. (Li<Be<B<C<N<O<F<Ar)

7. (Li<Be<B<C<N<O<F<Ar)

8. (a) Zn^{2+} ____$1s^2 2s^2 2p^6 3s^2 3p^6 4s^0 3d^{10}$_____

(b) Se^{2-} _____$1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^{10} 4p^6$_____

(c) Co^{2+} _____$1s^2 2s^2 2p^6 3s^2 3p^6 3d^7$_____

(d) Ti^{+} _____$1s^2 2s^2 2p^6 3s^2 3p^6 4s^1 3d^2$_____

(e) Mn^{3+} _____$1s^2 2s^2 2p^6 3s^2 3p^6 4s^0 3d^4$_____

(f) Sn^{2+} _____$1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^{10} 4p^6 5s^2 4d^{10}$_____