Answer on Question #75752, Chemistry / General Chemistry

Write the electric configuration following the ionFe3+

Solution

Electron configuration for uncharged atom of Fe is: $1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^6$

When an ion Fe^{3+} is formed electrons are removed firstly from 4s and afterwards from 3d, therefore electron configuration for Fe^{3+} is : $1s^2 2s^2 2p^6 3s^2 3p^6 3d^5$

Note: electron configuration for Fe^{2+} is: $1s^2 2s^2 2p^6 3s^2 3p^6 3d^6$

Answer: $1s^2 2s^2 2p^6 3s^2 3p^6 3d^5$