

Answer on the question #47970, Chemistry, Physical Chemistry

Question:

what are the quantum numbers for the valence electrons of calcium

Solution:

The valence electrons of Ca are two 4s electrons. Then:

The principal quantum number n is 4.

The angular quantum number l is 0, as the orbital is s- one. As this quantum number is zero, magnetic quantum number is also zero: $m = -l:1:+l$.

Answer: $n = 4, l = 0, m = 0$.