The L_{III} Subshell X-ray Production Cross Sections of Yb, Hf, Ta and W elements at Photons of 0.0208 Nanometer Wavelength

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Study of the L_{III} subshell X-ray production cross sections are important for understanding the complex processes involved in the inner-shell ionization and also provide a testing ground for the available theoretical models explaining these processes. The reliable and accurate data on the L_{III} X-ray production cross sections are important in atomic and molecular physics, qualitative and quantitative element analysis using XRF (X-ray Fluorescence) technique and medical physics. The L_{III} X-ray production cross-sections of Yb, Hf, Ta and elements were determined with experimentally and theoretically. The targets were irradiated with photons of 0.0208 nm wavelength. It has been observed that the obtained values in the present study agree with theoretical results and other available experimental values.