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**Measurement of L<sub>3</sub> Sub-Shell to M, N, O Shell Radiative Vacancy Transfer Probabilities for Ho, Lu and Hg Elements**

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The radiative vacancy transfer probabilities from L<sub>3</sub> sub-shell to M, N, O sub-shells were measured for the elements Ho, Lu and Hg. To obtain related parameters, we used 59.54 keV gamma photons of <sup>241</sup>Am radioactive source. Emitted L X-ray photons from targets were collected by means of a Si(Li) detector with resolution of 160 eV at 5.9 keV. The present results are generally in a good agreement with theoretical calculations and the other results obtained in the literature, within their range considering experimental uncertainty.