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Relative L X-Ray Fluorescence Cross-Sections in Heavy Elements In the Energy Region of 16-122 keV

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**Abstract:** Relative L<sub>1</sub>, L<sub>α</sub>, L<sub>β</sub> and L<sub>γ</sub> x-ray fluorescence cross-sections were observed in Ta, W, Re, Au, Hg, Tl, Pb, Bi, Th and U of 16.03, 17.78, 22.58, 25.77, 32.89, 38.18, 43.94, 50.21, 59.5 and 122 keV energies. In this study, L X-ray fluorescence cross-sections were measured at 59.5 and 122 keV and measured values of the other energies were taken from tables by Mann et. al. (1). The experimental relative fluorescence cross-sections were computed for the excitation energies 16.03, 17.78, 22.58, 25.77, 32.89, 38.18, 43.94, 50.21, 59.5 and 122 keV, compared with the theoretically calculated values by Scofield(11). The experimental results are found to agree with theory.

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