^{239}Am

In 1949, Seaborg et al. reported the discovery of ^{239}Am in the paper "The new element americium (atomic number 95)" (1949Se02). 38 MeV α particles bombarded ^{238}U and ^{237}Np targets and 19 MeV deuterons bombarded ^{239}Pu targets from the Berkeley 60-in. cyclotron. ^{239}Am was produced in the reactions ^{237}Np(α,2n) and ^{237}Np(α,n) and ^{239}Pu(d,n). Absorption curves were recorded and α and β activities were measured following chemical separation. "Am^{239}, which undergoes branching decay, decaying (a) by orbital electron capture with a 12-hr half life and emitting 0.285-mev γ rays and conversion electrons in addition to the characteristic x rays, and (b) by α-particle emission (energy unknown) in the proportion of approximately 0.001 α particle per electron capture."

Adapted from reference (2013Fr02)

1949Se02 G. T. Seaborg, R. A. James, and L. O. Morgan, The Transuranium Elements: Research Papers, Book 2, Vol. 14B, paper 22. 1, G. T. Seaborg ed. , p. 1525 (1949).

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