^{172}Ta

In the 1964 paper "Période du premier état excité du noyau de hafnium 172" Abou-Leila reported the observation of ^{172}Ta (1964Ab08). Hafnium oxide was bombarded with 72 MeV protons from the Orsay synchrocyclotron. ^{172}Ta was isotopically separated with a two stage separator and gamma rays were measured with a NaI(Tl) detector. "Nous avons trouvé la période de ^{172}Ta égale à 44±1 mn en désaccord avec la valeur obtenue par Butement (23.6±1.2mn)." [We found a half-life of 44±1 min for ^{172}Ta in disagreement with the value obtained by Butement (23.6±1.2 min)]. We credit Abou-Leila with the discovery because the identified the first excited state of the daughter nucleus (^{172}Hf) correctly and the somewhat longer half-life was later explained by a possible contamination (1972Ch45). The result by Butement and Briscoe (1961Bu13) mentioned in the quote was not considered correct by neither Abou-Leila nor later by Chang and Cheney (1964Ab08, 1972Ch45).

Adapted from reference (2012Ro36)

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