

## <sup>188</sup>Ta

Benlliure et al. published the discovery of <sup>188</sup>Ta in the 1999 paper entitled “Production of neutron-rich isotopes by cold fragmentation in the reaction <sup>197</sup>Au + Be at 950 A MeV” ([1999Be63](#)). A 950 A·MeV <sup>197</sup>Au beam from the SIS synchrotron of GSI was incident on a beryllium target and <sup>188</sup>Ta was produced in projectile fragmentation reactions. The FRS fragment separator was used to select isotopes with a specific mass-to-charge ratio. “In the right part of [the figure] the projected A/Z distributions are shown for the different elements transmitted in this setting of the FRS. In this setting the isotopes <sup>193</sup>Re, <sup>194</sup>Re, <sup>191</sup>W, <sup>192</sup>W, <sup>189</sup>Ta, <sup>187</sup>Hf and <sup>188</sup>Hf were clearly identified for the first time. Only isotopes with a yield higher than 15 counts were considered as unambiguously identified.” Although not explicitly mentioned in the text clear evidence for the presence of <sup>187</sup>Ta and <sup>188</sup>Ta can be seen in the A/Z isotopic identification plot. It is not clear why Benlliure et al. did not consider <sup>187</sup>Ta and <sup>188</sup>Ta as new isotopes, because no previous publications reporting the observation of these nuclei could be found.

Adapted from reference ([2012Ro36](#))

[1999Be63](#) J. Benlliure, K. H. Schmidt, D. Cortina-Gil, T. Enqvist *et al.*, Nucl. Phys. A **660**, 87 (1999).

[2012Ro36](#) R. Robinson and M. Thoennessen, At. Data Nucl. Data Tables **98**, 911 (2012).

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