

## **<sup>189</sup>Bi**

Gauvin et al. described the identification of <sup>189</sup>Bi in the 1973 paper “Reactions of <sup>40</sup>Ar with <sup>159</sup>Tb, <sup>142</sup>Nd and <sup>144</sup>Sm; new  $\alpha$ -activities from <sup>189</sup>Bi, <sup>173</sup>Pt and <sup>177</sup>Au” (1973Ga08). A terbium oxide target was bombarded with a 283 MeV <sup>40</sup>Ar beam from the ORSAY ALICE accelerator to form <sup>189</sup>Bi in the <sup>159</sup>Tb(<sup>40</sup>Ar,10n) reaction. Recoil nuclei were collected by the helium gas-jet technique and subsequent  $\alpha$ -decay spectra were measured. “Based on the fact that all of the observed counts in the 6.67 MeV peak occurred during the first counting interval of 2 sec, begun 1.5 sec after the end of the irradiation, we can set a conservative upper limit of < 1.5 sec on the half-life of <sup>189</sup>Bi.”

Adapted from reference (2013Fr04)

1973Ga08 H. Gauvin, R. L. Hahn, Y. Le Beyec, M. Lefort, and J. Livet, Nucl. Phys. A **208**, 360 (1973).

2013Fr04 C. Fry and M. Thoennessen, At. Data Nucl. Data Tables **99**, 365 (2013).

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