

## <sup>258</sup>Md

In “Nuclear properties of <sup>254</sup>Md, <sup>255</sup>Md, <sup>256</sup>Md, <sup>257</sup>Md and <sup>258</sup>Md”, Fields et al. reported the observation of <sup>258</sup>Md in 1970 ([1970Fi12](#)). An einsteinium target was bombarded with 46 MeV  $\alpha$ -particles from the Argonne 152 cm cyclotron forming <sup>258</sup>Md in the reaction <sup>255</sup>Es( $\alpha$ ,n). Alpha-particle spectra were measured with a Au-Si surface-barrier detector following chemical separation. “The  $\alpha$ -spectrum of <sup>258</sup>Md as measured with a 25 mm<sup>2</sup> detector for 8 d is shown in [the figure]. Two  $\alpha$  groups with energies  $6.716\pm 0.005$  and  $6.79\pm 0.01$  MeV were observed. The half-life of <sup>258</sup>Md was determined from the decay of the 6.716 MeV  $\alpha$  group and was found to be  $56\pm 7$  d.” Fields et al. did not consider the observation of <sup>258</sup>Md a discovery referring to a conference abstract ([1968Hu06](#)).

Adapted from reference ([2013Th02](#))

- [1968Hu06](#) E. K. Hulet, A. Ghiorso, R. W. Lougheed, J. E. Evans *et al.*, Bull. Am. Phys. Soc. 13, No. 4, 604, DF7 (1968).  
[1970Fi12](#) P. R. Fields, I. Ahmad, R. F. Barnes, R. K. Sjoblom, and E. P. Horwitz, Nucl. Phys. A **154**, 407 (1970).  
[2013Th02](#) M. Thoennessen, At. Data Nucl. Data Tables **99**, 312 (2013).

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