

## $^{128}\text{Ce}$

The first experimental evidence of  $^{128}\text{Ce}$  was discussed in the paper “Collective Levels in Light Even Ce Isotopes” by Ward et al. published in 1968 ([1968Wa14](#)). Beams of 80 MeV  $^{16}\text{O}$  and 90 MeV  $^{20}\text{Ne}$  were produced by the heavy-ion accelerator HILAC at Berkeley to form  $^{128}\text{Ce}$  in the fusion-evaporation reactions  $^{116}\text{Sn}(^{16}\text{O},4n)$  and  $^{112}\text{Cd}(^{20}\text{Ne},4n)$ , respectively. Four  $\gamma$ -ray transitions were measured with two lithium-drifted germanium counters and a level scheme was proposed. The paper does not mention that it represents the first identification of  $^{128}\text{Ce}$ . It can only be speculated that the authors were aware of a contribution to a conference proceeding reporting a half-life measurement of  $^{128}\text{Ce}$  ([1969ArZU](#)).

Adapted from reference ([2009Gi07](#))

- [1968Wa14](#) D. Ward, R. M. Diamond, and F. S. Stephens, Nucl. Phys. A **117**, 309 (1968).
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