

## $^{228}\text{Th}$

In 1905, Hahn from the University College of London published “A new radioactive element, which evolves thorium emanation. Preliminary communication” reporting the observation of new radioactive substance later identified as  $^{228}\text{Th}$  (1905Ha01). Activities from a “thorianite” sample were measured following chemical separation. “By a series of troublesome operations, a quantity of precipitate was obtained by aid of ammonia, and to separate iron, it was treated in acid solution with ammonium oxalate; this produced about 10 milligrammes of crystalline precipitate, which was by far the most active preparation obtained, and which shows after two months no diminution in its radio-active power... The close relation of the new body to thorium is proved, not merely by the apparent identity of the two emanations, but also in its having been separated from a mineral unusually rich in thorium.”

Adapted from reference (2013Fr03)

1905Ha01 O. Hahn, Proc. Roy. Soc. (London) **76**, 115 (1905).

2013Fr03 C. Fry and M. Thoennessen, At. Data Nucl. Data Tables **99**, 345 (2013).

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