

⁷⁸Br

The first observation of ⁷⁸Br was reported in the 1937 paper “Herstellung neuer Isotope durch Kernphotoeffekt” by Bothe and Gentner from the Institut für Physik am Kaiser Wilhelm Institut für medizinische Forschung in Heidelberg, Germany (1937Bo12). ⁷⁸Br was produced in photo-nuclear reactions with lithium γ -rays. “Brom (Br⁷⁹ + Br⁸¹) zeigte außer dem schon mitgeteilten 18-min-Abfall des Br⁸⁰ noch einen Abfall mit 3,5 min Halbwertszeit; als Träger wurde wiederum Brom chemisch nachgewiesen, es handelt sich also um Br⁷⁸.” [Brom (Br⁷⁹ + Br⁸¹) exhibited in addition to the already published 18-min decay of ⁸⁰Br another decay of 3.5 min; again it was chemically shown to be bromine, therefore it has to be ⁷⁸Br.] More accurate half-lives of 5 min. (1937Ch01, 1937He04) and 6.4 min. (1937Sn02) were reported later in the same year. A 36-h half-life had previously been incorrectly assigned to ⁷⁸Br (1935Ku01).

Adapted from reference (2012Gr02)

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