

²⁷⁸Bh

²⁷⁸Bh has not been discovered yet. In 2016, Hofmann et al. (2016Ho09) proposed to reassign a decay chain following the $^{48}\text{Ca} + ^{244}\text{Pu}$ reaction which was previously assigned to ²⁸⁹Fl (1999Og10) to ²⁹⁰Fl. The unexpected spontaneous fission half-life was explained by assuming electron capture to ²⁹⁰Nh. In 2023, Saamark-Roth et al. (2023Sa03) presumed an α -decay chain originating in ²⁹⁰Fl changing the earlier interpretation by the same research group: “Therefore, it cannot be incorporated in the main decay sequence of ²⁸⁹Fl, while an assignment to ²⁹⁰Fl is unfavored based on the half-life of the terminating fission” (2023Co04). However, ultimately the assignment was not deemed to be correct: “Here, the optional assignment of one Fl-decay chain to start from ²⁹⁰Fl was also presented but disfavored based on the lifetime of the terminating fission” (2023Sa03). The assignment of this decay chain is still uncertain.

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