

## <sup>111</sup>Ru

The credit for the discovery of <sup>111</sup>Ru is given to John et al. from the University of California at Livermore for the 1970 paper “Four-Parameter Measurements of Isomeric Transitions in <sup>252</sup>Cf Fission Fragments ” (1970Jo20). Delayed  $\gamma$ -rays between 3 ns and 2  $\mu$ s were measured in coincidence with both fragments from <sup>252</sup>Cf fission. Most masses were determined with an uncertainty of only one mass unit, however, Z was not measured. By comparing delayed  $\gamma$ -rays with previously measured prompt  $\gamma$ -rays by Watson et al. (1970Wa05), John et al. was able to identify <sup>111</sup>Ru. A previous 1-2 min half-life assigned to <sup>111</sup>Ru (1971Ri02) was incorrect. Five years later, Fettweis and del Marmol measured a half-life of 1.5(3) s for the ground state of <sup>111</sup>Ru (1975Fe12).

This assignment was changed (2016Th03) from the original compilation (2012Ny02) which credited a later paper by Hopkins et al. (1971Ho29) with the discovery of <sup>111</sup>Ru.

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