

## <sup>79</sup>Cu

The discovery of <sup>79</sup>Cu was reported by Kratz et al. in “Neutron-rich isotopes around the *r*-process ‘waiting-point’ nuclei <sup>79</sup>Cu<sub>50</sub> and <sup>80</sup>Zn<sub>50</sub>” in 1991 ([1991Kr15](#)). A <sup>238</sup>UC-graphite target was irradiated with 600 MeV protons from the CERN synchrocyclotron and the fragments were separated and identified with the CERN ISOLDE on-line mass separator. “As an example, [the figure] shows a typical multiscaling curve for A = 79, after subtraction of the 2.85 s <sup>79</sup>Ga component. Clearly, two short-lived β<sup>-</sup> activities are seen, <sup>79</sup>Zn with T<sub>1/2</sub> ≈ 1 s and the new N = 50 ‘waiting-point’ nucleus <sup>79</sup>Cu with T<sub>1/2</sub> = (188±25) ms.”

Adapted from reference ([2012Ga06](#))

- [1991Kr15](#) K. L. Kratz, H. Gabelmann, P. Moller, B. Pfeiffer *et al.*, Z. Phys. A **340**, 419 (1991).
- [2012Ga06](#) K. Garofali, R. Robinson, and M. Thoennessen, At. Data Nucl. Data Tables **98**, 356 (2012).

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