

⁶⁴Cr

In their paper “New neutron-rich isotopes in the scandium-to-nickel region, produced by fragmentation of a 500 MeV/u ⁸⁶Kr beam”, Weber et al. presented the first observation of ⁶⁴Cr in 1992 ([1992We04](#)). The isotope was produced in the fragmentation reaction of a 500 A·MeV ⁸⁶Kr beam from the heavy-ion synchrotron SIS on a beryllium target and separated with the zero-degree spectrometer FRS at GSI. “The isotope identification was based on combining the values of Bρ, time of flight (TOF), and energy loss (ΔE) that were measured for each ion passing through the FRS and its associated detector array... The results shown in [the figure] represent unambiguous evidence for the production of the very neutron-rich isotopes ⁵⁸Ti, ⁶¹V, ⁶³Cr, ⁶⁶Mn, ⁶⁹Fe, and ⁷¹Co, and yield indicative evidence for the production of ⁶⁴Cr, ⁷²Co, and ⁷⁵Ni.” Three counts of ⁶⁴Cr were recorded.

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

[1992We04](#) M. Weber, C. Donzaud, J. P. Dufour, H. Geissel *et al.*, *Z. Phys. A* **343**, 67 (1992).

[2012Ga06](#) K. Garofali, R. Robinson, and M. Thoennessen, *At. Data Nucl. Data Tables* **98**, 356 (2012).

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