^{80}Ni

In the 2014 paper "β-Decay Half-Lives of ^{76,77}Co, ^{79,80}Ni, and ^{81}Cu: Experimental Indication of a Doubly Magic ^{78}Ni" ^{80}Ni was reported for the first time by Xu et al. (2014Xu07). A 345 MeV/nucleon ^{238}U from the RIKEN cyclotron accelerator complex was incident on a beryllium target and projectile fragments were analyzed with the BigRIPS separator and the ZeroDegree Spectrometer. The fragments were then implanted in the highly segmented beam stopper, wide-range active silicon

strip stopper array for beta and ion detection (WAS3ABi). "The half-lives of 20 neutron-rich nuclei with Z = 27−30 have been measured at the RIBF, including five new half-lives of ^{76}Co($21.7^{+6.5}_{-4.9}$ ms), ^{77}Co($13.0^{+7.2}_{-4.3}$ ms), ^{79}Ni($43.0^{+8.6}_{-7.5}$ ms), ^{80}Ni($23.9^{+26.0}_{-17.2}$ ms), and ^{81}Cu(73.2±6.8 ms)."

Adapted from reference (2015Th03)

2014Xu07 Z. Y. Xu, S. Nishimura, G. Lorusso, F. Browne *et al.*, Phys. Rev. Lett. **113**, 032505 (2014).

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