^{7}B

McGrath et al. reported for the first time an unbound state of ^{7}B in "Unbound Nuclide ^{7}B" in 1967 (1967Mc14). A carbon-backed ^{10}B target was bombarded with a 50 MeV ^{3}He beam from the Berkeley 88-in. cyclotron. Charged particles from the reaction ^{10}B(^{3}He,^{6}He)^{7}B were measured in two four-counter semiconductor telescopes. "...the broad peak at about 29.8 MeV is attributed to the unbound ground state of ^{7}B... The mass excess [^{12}C=0] of ^{7}B was found to be 27.94±0.10 MeV."

In 1965, Detraz, Cerny, and Pehl had deduced ^{7}B to be unbound from the measurement of the T = 3/2 level in ^{7}Be (1965De08).

Adapted from reference (2012Th01)

1965De08 C. Detraz, J. Cerny, and R. H. Pehl, Phys. Rev. Lett. **14**, 708 (1965).

1967Mc14 R. L. McGrath, J. Cerny, and E. Norbeck, Phys. Rev. Lett. **19**, 1442 (1967).

2012Th01 M. Thoennessen, At. Data Nucl. Data Tables **98**, 43 (2012).

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