

${}^9\text{Be}({}^{28}\text{Si}, {}^{20}\text{Mg})$ [2016Li45,2017Su05](#)

| Type | Author | Citation | Literature Cutoff Date |
|-----------------|--------------------------|----------|------------------------|
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[2016Li45,2017Su05](#): XUNDL dataset compiled by TUNL, 2017.

A beam of ≈ 0.59 ${}^{20}\text{Mg}/\text{s}$ was produced by fragmenting a 75 MeV/A ${}^{28}\text{Si}$ beam on a 1.5 mm thick ${}^9\text{Be}$ target at the Heavy Ion Research Facility of Lanzhou. The beam was magnetically purified before being implanted into a telescope of position sensitive Si detectors that measured the decay energies. A set of five clover segmented HPGe surrounded the telescope to detect the β -delayed γ -ray emissions.

The analysis was limited to events within the first 450 ms after implantation of a ${}^{20}\text{Mg}$ ion. About 10 peaks in the decay energy spectrum were easily attributed to β -delayed proton groups. The decay paths and branching ratios were interpreted using $p+\gamma$ coincidences for γ -rays from ${}^{19}\text{Ne}^*(238,275,1508,1536)$. The ${}^{20}\text{Mg}$ half-life, $T=90.0$ ms δ , was deduced from analysis of the two strongest delayed proton groups $E_p=(768,1589)$ keV.

 ${}^{20}\text{Mg}$ Levels

| E(level) | $T_{1/2}$ | Comments |
|----------|------------------|--|
| 0 | 90.0 ms δ | $T_{1/2}$: From (2017Su05). |