

$^{14}\text{C}(\pi^{-},\text{pd})$

2016Ko22

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	J. H. Kelley, C. G. Sheu and J. E. Purcell		NDS 198,1 (2024)	1-Aug-2024

2016Ko22: $^{14}\text{C}(\pi^{-},\text{pd})$ E=stopped. A beam of 30 MeV π^{-} mesons, from the LAMPF facility, was moderated in a beryllium foil before stopping in a $\approx 24\text{ mg/cm}^2$ 77% enriched ^{14}C target. Deuterons ejected from the target were analyzed to obtain details on the *inclusive* $\pi^{-}+^{14}\text{C}\rightarrow\text{p}+^{13}\text{Be}^{*}\rightarrow\text{p}+^{11}\text{Li}+\text{d}$ reaction; the deuteron emission threshold is 20.8 MeV. The authors suggest a broad state or group of unresolved states around $E_x\approx 30\text{ MeV}$.

^{13}Be Levels

$E(\text{level})^{\dagger}$

$\approx 30\times 10^3$

† The ground state is taken as $E_{\text{c.m.}}(\text{n}+^{12}\text{Be}_{\text{g.s.}})=0.45\text{ MeV}$ *I*; see Adopted Levels.