

${}^9\text{Be}(\pi^+, \pi^-)$  1980Bu15

Type	Author	Citation	History	Literature Cutoff Date
Full Evaluation	J. H. Kelley, B. Grees	ENSDF		31-July-2020

[1974Ka07](#): Cross sections for  $\sigma(E=30-250 \text{ MeV})$  are calculated along with  $\sigma(\theta, E_{\pi^-}=175 \text{ MeV})$ .

[1980Bu15](#): The  ${}^9\text{C}$  ground state energy was used to calibrate the EPICS spectrometer at LAMPF. The ground state peak is well resolved from other reaction components. Measured  $d\sigma/d\Omega(\theta=5^\circ)$  at  $E_{\pi^-}=180 \text{ MeV}$ . In [\(1986Se04\)](#) a similar exercise is carried out at  $E_{\pi^-}=292 \text{ MeV}$ .

[1989Gr06](#): Measured  $\sigma(E_{\pi^-}=180, 240)$  for the double charge-exchange (DCX) reaction  ${}^9\text{Be}(\pi^+, \pi^-)$  and developed a phenomenological model to explain the observations.

[2007Fo05](#): Measured  $(\pi^+, \pi^-)$  and  $(\pi^-, \pi^+)$  reactions on  ${}^6,7\text{Li}$ ,  ${}^9\text{Be}$ ,  ${}^{12}\text{C}$  at  $E_{\pi^-}=120, 180, 240 \text{ MeV}$  and for  $\theta=25^\circ, 50^\circ, 80^\circ$  and  $130^\circ$  at LAMPF. They compared their data with a model where the DCX reaction proceeds via two sequential single charge exchange reactions.

 ${}^9\text{C}$  Levels

E(level)

0