

$^{12}\text{C}(^{14}\text{N}, ^{14}\text{N})$  1975Aj02

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	J. H. Kelley, J. E. Purcell and C. G. Sheu		NP A968,71 (2017)	1-Jan-2017

- 1969He06:  $^{12}\text{C}(^{14}\text{N}, ^{14}\text{N})$  E=22.5 MeV, measured  $\sigma(\theta)$ .  
 1970Vo02:  $^{12}\text{C}(^{14}\text{N}, ^{14}\text{N}), (^{14}\text{N}, ^{14}\text{N}')$  E=78 MeV, measured  $\sigma(\theta)$ . DWBA analysis.  
 1971Ko11:  $^{12}\text{C}(^{14}\text{N}, ^{14}\text{N})$  E=65-88 MeV, measured  $\sigma(E, \theta)$ . Deduced optical model parameters.  
 1971Vo01:  $^{12}\text{C}(^{14}\text{N}, ^{14}\text{N})$  E<sub>c.m.</sub>=9.65, 9.85 MeV, measured  $\sigma(\theta)$ .  
 1974Ko38:  $^{12}\text{C}(^{14}\text{N}, ^{14}\text{N})$  E=50-90 MeV, measured  $\sigma(E, \theta)$ . Deduced optical model parameters.  $^{12}\text{C}(^{14}\text{N}, ^{14}\text{N}')$ , measured  $\sigma(\theta)$ .  
 1975Ec03:  $^{12}\text{C}(^{14}\text{N}, ^{14}\text{N})$  E=15.0-25.0 MeV, measured  $\sigma(E, \theta)$ .  
 1975Ra33:  $^{12}\text{C}(^{14}\text{N}, ^{14}\text{N})$  E=155 MeV, analyzed data.  
 1977To02:  $^{12}\text{C}(^{14}\text{N}, ^{14}\text{N}), (^{14}\text{N}, ^{14}\text{N}')$  E=155 MeV, measured  $\sigma(\theta)$ . Deduced optical potentials.  $^{12}\text{C}$  levels deduced  $\beta$ .  
 1979Mo14:  $^{12}\text{C}(^{14}\text{N}, ^{14}\text{N})$  E=65.8-95.2 MeV, measured  $\sigma(E, \theta)$ . Optical model, exact finite-range-DWBA analysis.  
 1981Co11:  $^{12}\text{C}(^{14}\text{N}, ^{14}\text{N})$  E=45-60 MeV, measured  $\sigma(E, \theta)$ . Deduced reaction mechanism.  
 1988Ar23:  $^{12}\text{C}(^{14}\text{N}, ^{14}\text{N}), (^{14}\text{N}, ^{14}\text{N}')$  E=86 MeV, measured  $\sigma(E(^{14}\text{N}))$ . Deduced model parameters.  
 1990Br21:  $^{12}\text{C}(^{14}\text{N}, ^{14}\text{N})$  E=280 MeV, measured  $\sigma(\theta)$ . Deduced model parameters.  
 1990De13:  $^{12}\text{C}(^{14}\text{N}, ^{14}\text{N})$  E=80.73, 100.3 MeV, analyzed  $\sigma(\theta)$ . Deduced model parameters.  
 1997Zi05:  $^{12}\text{C}(^{14}\text{N}, ^{14}\text{N}), (^{14}\text{N}, ^{14}\text{N}')$  E=116 MeV, measured  $\sigma(\theta)$ . Deduced reaction mechanism.  $^{12}\text{C}$  deduced deformation parameters.

 $^{12}\text{C}$  LevelsE(level)<sup>†</sup>

0  
 4.4×10<sup>3</sup>  
 7.7×10<sup>3</sup>  
 9.6×10<sup>3</sup>  
 10.8×10<sup>3</sup>  
 11.8×10<sup>3</sup>  
 12.7×10<sup>3</sup>  
 13.4×10<sup>3</sup>  
 14.1×10<sup>3</sup>

<sup>†</sup> See unpublished reference in (1975Aj02).