^{46}Ti(^{14}C,^{16}O) 1979Pe08

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Jun Chen, Balraj Singh and John A. Cameron	NDS 112, 2357 (2011)	31-Jul-2011

1979Pe08: E=51 MeV ^{14}C beam of 200 nA produced from a sputter source and accelerated in a Van de Graaff accelerator at Los Alamos Scientific Laboratory. Target of 100 μg/cm^2 self-supporting ^{46}Ti. ^{16}O detected and identified in a Q3D magnetic spectrograph with a helical cathode proportional counter on the focal plane. Measured σ(E(^{16}O),θ). Deduced levels, J^π, L, spectroscopic factors from DWBA analysis.

Target ^{46}Ti $J^\pi=0^+$.

^{44}Ca Levels

E(level)	J^π	L[‡]	Spectroscopic factors[†‡]
0	0^+	0	0.84
1160	2^+	2	0.76
1880	0^+	0	0.34
2280	4^+	4	0.88
2660	2^+	2	0.70
3040	4^+	4	0.80
3310		3	3.88

† $NC^2s_1C^2s_2$ values.

‡ Extracted from the comparison of $\sigma(\theta)$ distributions with the DWBA predictions.