

$^{30}\text{Si}(\alpha,t)$ 1994Si19

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Jun Chen and Balraj Singh		NDS 184, 29 (2022)	24-Jun-2022

1994Si19: 26.6 MeV protons from U-120 cyclotron at the Institute for Nuclear Physics in Krakow. Enriched SiO_2 targets (94.65% ^{30}Si). Measured $\sigma(\theta)$, $\theta_{\text{lab}}=20^\circ-170^\circ$ with surface barrier Si ΔE -E telescope for detecting reaction products. FWHM=200 keV. DWBA analysis.

1967Mi09: E=42 MeV α beam from the University of Washington cyclotron. Measured $\sigma(\theta)$ at $\theta(\text{c.m.})=0^\circ-70^\circ$ with a ΔE -E counter. Deduced J, π , L-transfers for 1270 and 2230 levels from DWBA analysis.

Other: **1987BeZO.**

 ^{31}P Levels

E(level) [†]	J π [‡]	L [‡]	S [#]
0	1/2 ⁽⁺⁾		
1266	3/2 ⁽⁺⁾	2	0.81
2234	5/2 ⁽⁺⁾	2	0.19

[†] From **1994Si19**.

[‡] From DWBA analysis of measured $\sigma(\theta)$ with j-dependence (**1994Si19,1967Mi09**).

[#] Relative to g.s. (**1994Si19**).