

$^{142}\text{Ce}(p,p')$ 1972Le17

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	E. Browne, J. K. Tuli		NDS 113, 715 (2012)	31-May-2011

E=9.6-12 MeV.

Studied IAS.

Measured: $\sigma(E,\theta)$ for resonances at E(p)(c.m.)=9844-11133 keV; deduced L, J, Γ , S(p,p') of IAR (1972Le17); measured analyzing power for (p,p') on polarized protons, deduced J^π for strongest IAR (1969Gr01).

Observed resonances are IAS to parent ^{143}Ce levels: 0, 19, 808, 862, 1154, 1172, 1195, 1298; L and S values are compatible with data from $^{142}\text{Ce}(d,p)$ (1972Le17).

 ^{143}Pr Levels

E(level) [†]	J π [#]	T _{1/2} [‡]	L	S
15668	3/2 ⁻	86 keV 20	1	(0.07)
15687	7/2 ⁻	84 keV 5	3	0.60
16478	3/2 ⁻	110 keV 10	1	0.45
16536	(1/2) ⁻	80 keV 10	1	0.30
16826	3/2 ⁻	60 keV 20	1	(0.07)
16859	3/2 ⁻ ,(1/2 ⁻)	34 keV 20	1	
16869	(5/2) ⁻	102 keV 30	3	(0.12)
16957	(5/2) ⁻	95 keV 20	3	(0.17)

[†] Resonance energy+S(p)=5824.

[‡] Total Γ .

[#] Adopted values.