

$^{142}\text{Nd}(d, ^3\text{He})$ 1969Ba12,1971Wi04

Type	Author	History Citation	Literature Cutoff Date
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$E(d)=29$ MeV.

1969Ba12,1971Wi04: measured $\sigma(E,\theta)$, DWBA analysis, deduced C^2S spectroscopic factors. 1971Wi04 list results as “STANDARD” and “MODIFIED” as from standard DWBA and using a radius of the spin-orbit term of the bound-state well reduced by 10% relative to the radius of the central well, respectively,

2001Kr01: reanalyzed existing data with a nonlocal finite-range DWBA analysis with a bound state function obtained from $(e,e'p)$ experiments.

 ^{141}Pr Levels

E(level)	J^π [†]	L	C^2S [‡]	Comments
0.0	$5/2^+$	2	1.25	C^2S : 2.53 (1969Ba12), 2.12 (1971Wi04,std.), 2.70 (1971Wi04,mod.).
140 10	$7/2^+$	4	3.79	C^2S : 6.28 (1969Ba12), 6.20 (1971Wi04,std.), 6.06 (1971Wi04,mod.).
1120 30	$11/2^-$	(5)	0.36	C^2S : 0.74 (1969Ba12), 0.86 (1971Wi04,std.), 1.03 (1971Wi04,mod.).
1300 30	$1/2^+$	(0)	0.07	C^2S : 0.11 (1969Ba12), 0.09 (1971Wi04,std.), 0.09 (1971Wi04,mod.).
1610 30	$3/2^+$	(2)		C^2S : 0.35 (1969Ba12).

[†] Adopted values.

[‡] From 2001Kr01 reanalyzing 1969Ba12 data. The original results of 1969Ba12 together with those of 1971Wi04 are shown in table comments (the original data of 1969Ba12 are normalized to $\Sigma C^2S=10$; as mentioned above results of 1971Wi04 are “STANDARD” (std.) and “MODIFIED” (mod.)).