

$^{90}\text{Zr}(\text{p},\text{n}) \quad 1980\text{Ba16}, 1988\text{Bo43}$ 

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	S. K. Basu, E. A. Mccutchan	NDS 165, 1 (2020)		1-Mar-2020

1988Bo43:  $E(p)=22.5$  MeV. Measured  $\sigma(\theta)$  with neutron time-of-flight, distorted wave analysis.

1996Gr07:  $E(p)=26$  MeV. Measured neutron time-of-flight.

1980Ba16:  $E(p)=120$  MeV. Measured  $\sigma(\theta)$  with neutron time-of-flight, FWHM=660 keV. L values are from comparison with distorted wave calculations.

For polarization transfer in the (p,n)-reaction, see 1987Sa14, 1987Ta22.

For studies of the IAS of  $^{90}\text{Zr}(\text{g.s.})$ , see 1971Be46 ( $E(p)=23$  MeV), 1973Jo05 ( $E(p)=22, 30, 40$  MeV), 1975Do08 ( $E(p)=25, 35, 45$  MeV), 1976Go23 ( $E(\text{pol p})=22.8$  MeV).

 $^{90}\text{Nb}$  Levels

$E(\text{level})^\dagger$	$L^\dagger$	Comments
350		
$1.0 \times 10^3$ 2		E(level): From 1988Bo43.
$2.13 \times 10^3$ 20	0	E(level): from 1996Gr07.
$3.0 \times 10^3$ 3	0	
$5.1 \times 10^3$ 2	0	E(level): IAS of $^{90}\text{Zr}(\text{g.s.})$ .
$8.7 \times 10^3$ 3	0	
$13.4 \times 10^3$ 4	(1)	
$17.9 \times 10^3$ 6	1	

$^\dagger$  From 1980Ba16, except where noted.