^{90}Zr(e,e′p) 1988De43

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh	NDS 114, 1 (2013)	20-Oct-2012

1988De43 (also 1987De01,1985De39,1985La12): E=265-410 MeV. Measured σ, deduced proton momentum distributions.
1997Vo05: E=85, 102 MeV. Measured protons in coin with electrons and angular distribution of protons from the decay of 16.28 MeV isobaric-analog state in ^{90}Zr. The proton decay of 16.28 resonance populates 0, 1510 and 1740 levels in ^{89}Y.
1986Do05, 1985Do15, 1983Do06: E=17-104 MeV. Proton decay of IAS in ^{90}Zr.
1974As02: E=20.3-22.0, 30 MeV. Decay of 19.4, 20.7 and 21.4 MeV resonances in ^{90}Zr populates 0, 1510, 1740 and 2880 levels.
1974Sh05 (also 1975Sh04): E=14-25.5 MeV. Measured GDR at 16.7, 21.6 MeV.
Analysis of first four levels by 2001Kr01 shows that spectroscopic factors in (e,e′p) and (d,^{3}He) experiments are comparable.
Additional information 1.

^{89}Y Levels

E(level)	Jπ‡	S†	Comments
0	$1/2^-$	0.72 *7*	$2p_{1/2}$.
909	$9/2^+$	0.54 *5*	$1g_{9/2}$.
1507	$3/2^-$	1.86 *14*	$2p_{3/2}$.
1745	$5/2^-$	2.77 *19*	$1f_{5/2}$.
2880	$(3/2)^-$		E(level): from 1974As02 only.
4000 *50*	$3/2^-$	0.12 *2*	$2p_{3/2}$.
5040 *50*	$(5/2^-)$	0.29 *4*	$1f_{5/2}$. Consistent with L=3.
$6.5\times10^{3\#}$ *3*	$(7/2^-)$		$1f_{7/2}$.
$12\times10^{3\#}$ *2*	$(1/2^+,3/2^+)$		$2s_{1/2}$ or $1d_{3/2}$.
$17\times10^{3\#}$ *2*	$(3/2^+,5/2^+)$		$1d_{3/2}$ or $1d_{5/2}$.

† S factors (1988De43).
‡ From Adopted Levels, unless otherwise stated.
# Deep hole states (1988De43).