^{89}Y(π^+,K+):hypernucleus 2001Ho30

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

Includes (K^-,π^-).

2001Ho30, 1996Ha05, 2003Ki22 (also 2000Na13,1996Ha47,1995Aj01): E=1.05 GeV/c, measured hypernuclear mass spectra, deduced decay widths. See also 2005Bh08 and 2003Ha28 for analysis.

1991Pi07: E=1048 MeV/c, measured $\sigma(\theta)$, deduced binding energies.

1981Be17: ^{89}Y(K^-,π^-) E=720 MeV/c, measured $\sigma(\theta)$.

Additional information 1.

^{89}Y Levels

Cross sections are from 2001Ho30.

E(level)[†]	Comments
0	E(level): measured binding energy=23.11 MeV *11* (2001Ho30), 22.0 MeV *5* (1996Ha05), 22.1 MeV *16* (1991Pi07). L=0, s orbit, dσ/dΩ=0.60 μb *6*.
6.01×10^3[‡] *13*	dσ/dΩ=2.00 μb *22*.
7.38×10^3[‡] *21*	dσ/dΩ=1.38 μb *19*.
12.79×10^3[#] *12*	dσ/dΩ=5.1 μb *3*.
14.42×10^3[#] *16*	dσ/dΩ=3.52 μb *25*.
19.98×10^3[@] *12*	dσ/dΩ=6.9 μb *3*.
21.68×10^3[@] *12*	dσ/dΩ=6.8 μb *3*.
27×10^3 *1*	E(level): from wide bump in hypernuclear mass spectrum figure 5 of 2001Ho30.

[†] Hypernuclear states, values obtained from binding energies given by 2001Ho30. Each of the p-, d- and f orbit gives rise to doublet with separations 1.37 MeV *20* for p orbit, 1.63 MeV *14* for d orbit and 1.70 MeV *10* for f orbit.

[‡] Doublet for L=1, p orbit.

[#] Doublet for L=2, d orbit.

[@] Doublet for L=3, f orbit.