^{76}Se(n,n′) 1984Ku09,1981Br23,1979Ef01

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh, Jun Chen and Ameenah R. Farhan	NDS 194,3 (2024)	8-Jan-2024

1984Ku09 (also 1984KuZW): E=8, 10 MeV. Time-of-flight method. $\sigma(\theta)$ data from 15° to 160° in steps of 6°. FWHM≈150 keV. Coupled-channel analysis using first two 0^+ and 2^+ levels, first 4^+ and first 3^- levels. Comparison with asymmetric rotational model, rotation-vibration model, anharmonic vibrational model and harmonic vibrational model. Authors find that none of the models adequately describes all observations.

1981Br23: E=8 MeV. Effect of coupling of 2-phonon states on elastic and inelastic (for 2^+ level) cross sections studied. Deformation parameter for first 2^+ level deduced.

1979Ef01: E=600-1200 keV. Cross section data for 2^+ level analyzed and deformation parameter deduced.

1976La12: E=6, 8, 10 MeV. Coupled-channel analysis for 0^+ and 2^+ levels. Deformation parameter deduced.

Others:

1992Mu20: E<2.5 MeV. Analyzed $\sigma(\theta)$ data.

1990Go13: E=1.5-5.0 MeV. Theoretical analysis.

1986Dz01: E=8 MeV. Theoretical analysis.

1984Ko09: E=1.08 MeV. Time-of-flight method for g.s. and 2^+ state.

1983Bh01: (n,n). Theoretical analysis.

1983By04: E=8 MeV. Theoretical analysis.

1980Ko17: (n,n) E=1.26, 5.19 eV. Measurement of coherent neutron scattering lengths and free cross sections.

^{76}Se Levels

E(level)	J^π †	Comments
0	0^+	
559	2^+	β_2R=1.52 *5* (1984Ku09), 1.72 5 (1981Br23); β_2=0.28 (1976La12).
2429	3^-	β_3R=0.77 *5* (1984Ku09).

† From Adopted Levels.