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 $^{80}\text{Se}(\text{n},\text{n}')$     1984Ku09,1984Ko09

| Type            | Author       | History<br>Citation | Literature Cutoff Date |
|-----------------|--------------|---------------------|------------------------|
| Full Evaluation | Balraj Singh | NDS 105, 223 (2005) | 22-Jun-2005            |

Includes (n,n) and (pol n,n).

1984Ku09 (also 1984KuZW,1983Ko20): E=8, 10 MeV. Measured  $\sigma(\theta)$ , time-of-flight method, FWHM=120-150 keV, coupled-channel analysis using asymmetric-rotor model and rotation-vibration model.

1984Ko09: E≈1 MeV. Measured  $\sigma(\theta)$ , time-of-flight method, coupled-channel analysis.

1992Mu20: E<1.5 MeV. Analyzed  $\sigma(\theta)$  for g.s. and first 2<sup>+</sup> state.

1990Go13: E=1.5, 2.0, 2.5, 3.0, 5.0 MeV. Analysis of  $\sigma(\theta)$  data using coupled-channel analysis.

1983Fe05: E=0.728-1.268 MeV. Analysis of  $\sigma(E)$  data.

1983By04: E=8 MeV, analysis of  $\sigma(\theta)$  data.

1983Bh01: (n,n) E=6-10 MeV. Deduced optical-model parameters.

1981Br23: E=8 MeV. Calculated  $\sigma(\theta)$ , reanalysis of data from 1976La12.

1980Ko17: (n,n) E=slow. Measured scattering to total ratio.

1979Ef01: E=low energy. Analysis of  $\sigma(E)$  data.

1976La12: E=8 MeV. Measured  $\sigma(\theta)$ , coupled-channel analysis. See reanalysis of data by 1984De01 and 1981Br23.

1965Ke03: (pol n,n) E=3.3 MeV.

1961Ts07: (n,n') E=3.4-4.6 MeV.

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 $^{80}\text{Se}$  Levels

| E(level) <sup>†</sup> | J <sup>‡</sup> | Comments   |
|-----------------------|----------------|--|
| 0                     | 0 <sup>+</sup> |  |
| 666                   | 2 <sup>+</sup> | $\beta_2=0.242$ 10 or 0.247 10 (deduced by 1988Ba35 from $\beta_2R=1.25$ 5 (1984Ku09)), 0.25 (1976La12). Data from 1976La12 reanalyzed by 1984De01 and 1981Br23 giving $\beta_2R=1.34$ 4 (1981Br23); $\beta_2=0.265$ 20 or 0.293 25 (1984De01). Others: 0.225 (1990Go13), 0.25 (1979Ef01). |
| 1450                  | 2 <sup>+</sup> |  |
| 1478                  | 0 <sup>+</sup> |  |
| 1701                  | 4 <sup>+</sup> |  |
| 2718                  | 3 <sup>-</sup> | $\beta_3=0.151$ 10 (from $\beta_3R=0.78$ 5 (1984Ku09)).  |

<sup>†</sup> From 1984Ku09.

<sup>‡</sup> From 'Adopted Levels'.