

$^{74}\text{Ge}(^{16}\text{O},^{16}\text{O}'),(^{18}\text{O},^{18}\text{O}')$ [1976Co04](#),[1977Bo19](#),[1976Ng01](#)

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh, Ameenah R. Farhan		NDS 107, 1923 (2006)	30-Apr-2006

Others: [1983Os07](#), [1982En04](#), [1976Ch27](#), [1975Wi02](#), [1974GiZR](#), [1972Ob05](#), [1971KoZY](#).

Theory and analysis of data: [1981Ra08](#), [1981Vi01](#), [1980Lo01](#), [1979Fe03](#), [1977Le12](#).

[1976Co04](#): ($^{16}\text{O},^{16}\text{O}$), ($^{16}\text{O},^{16}\text{O}'$), ($^{18}\text{O},^{18}\text{O}$), ($^{18}\text{O},^{18}\text{O}'$) at 56 MeV bombarding energy. Resolution=220 keV. $\sigma(\theta)$ data.

Coupled-channel calculations. g.s. and first 2^+ state studied. For reanalysis of data see [1979Fe03](#).

[1977Bo19](#): $^{76}\text{Ge}(^{16}\text{O},^{18}\text{O})$ at 77.6 MeV. Resolution=80 keV. $\sigma(\theta)$ data. Coupled-channel calculations. g.s. and first 2^+ state studied. See [1977Le12](#) for analysis of data. Other: [1983Os07](#).

[1976Ng01](#): ($^{16}\text{O},^{16}\text{O}$) at 76 MeV and ($^{20}\text{Ne},^{20}\text{Ne}$) at 95 MeV. Resolution= 400-800 keV. $\sigma(\theta)$ data. Optical parameters deduced.

[1982En04](#): (α,α) at 25 MeV. Resolution=65-100 keV. $\sigma(\theta)$ data.

[1976Ch27](#): ($^6\text{Li},^6\text{Li}$) at 50.6 MeV. Resolution=50-200 keV. $\sigma(\theta)$ data. Optical parameters deduced.

[1975Wi02](#): ($^{14}\text{N},^{14}\text{N}$) at 32-46 MeV. Resolution=300-500 keV. $\sigma(\theta)$ data. Optical parameters deduced.

[1974GiZR](#): ($^{74}\text{Ge},^{74}\text{Ge}$) at 81 MeV.

[1972Ob05](#): ($^{16}\text{O},^{16}\text{O}'$) at 40-56 MeV. Resolution=300-500 keV. $\sigma(\theta)$ data. Optical-model fits for first three levels.

[1971KoZY](#): $^{70}\text{Zn}(^{16}\text{O},^{12}\text{C})$ at 48 MeV. No details are available.

 ^{74}Ge Levels

E(level) [†]	J ^π [†]	Comments
0	0 ⁺	
596	2 ⁺	$\beta_2=0.290, 0.298$ from ($^{16}\text{O},^{16}\text{O}'$) (1979Fe03 , 1976Co04). $\beta_2=0.300, 0.298$ from ($^{18}\text{O},^{18}\text{O}'$) (1979Fe02 , 1976Co04). See also 1981Ra08 for analysis of data for this level.
1200	2 ⁺	Populated in ($^{16}\text{O},^{16}\text{O}'$) (1972Ob05).

[†] From 'Adopted Levels'.