

$^{238}\text{U}(\text{d},\text{d}')$

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	E. Browne, J. K. Tuli		NDS 127, 191 (2015)	1-Jun-2014

Additional information 1.

For a comparison of $d'(\theta)$ of inelastically and elastically scattered deuterons with coupled-channel calculations, see [1977Fe11](#).

All data are from [1972El08](#), except where noted otherwise.

[2013Gu27](#): Nuclear structure in the quasi-continuum region.

[2006Ha42](#): E=4-200 MeV, deduced σ .

[2006Pr13](#): E=10-10000 MeV, deduced σ .

[1972El08](#): E=16 MeV. σ , FWHM AP 8 keV. $\theta=90^\circ$, 125°

[1974ThZG](#): 12.1, 13.1 MeV. σ . $\theta=90^\circ$, 125°

[1967Fe09](#): E=12 MeV. σ .

 ^{238}U Levels

E(level)	J^π †	Comments
0.0‡	0 ⁺	
45‡	2 ⁺	
149‡	4 ⁺	
308‡	6 ⁺	
520‡	8 ⁺	
679#	1 ⁻	
731#	3 ⁻	
825#	5 ⁻	
930	1 ⁻	
967		
998	3 ⁻	B(E3)=0.22 3 normalized using B(E3)(731 level)=0.54 (1972El08).
1037@	2 ⁺	
1061&	2 ⁺	B(E2)=0.10 1 normalized using B(E2)(45 level)=11.7 (1972El08).
1103		
1126		
1169	3 ⁻	B(E3)=0.29 5 normalized using B(E3)(731 level)=0.54 (1972El08).
1231		
1288	5 ⁻	
1375		
1512		
1530		
1630		
1647		
1665		
1712		
1758		
1774		
1807		

† Assignments are based on intensity patterns, absolute cross sections and $\sigma(\theta=90^\circ)/\sigma(\theta=125^\circ)$ ([1972El08](#)).

‡ $K^\pi=0^+$ ground-state band.

$K^\pi=0^-$ octupole-vibrational band.

@ $K^\pi=0^+$ β -vibrational band.

& $K^\pi=2^+$ γ -vibrational band.