

---

$^{188}\text{Os}(\alpha,\alpha'),(\text{p},\text{p}')$     **1978Bu21,1976Ba06,1971Kr10**

---

Type	History		Citation	Literature Cutoff Date
	Author			
Full Evaluation	F. G. Kondev, S. Juutinen, D. J. Hartley		NDS 150, 1 (2018)	1-Feb-2018

**1978Bu21:**  $E\alpha=24$  MeV. Enge split-pole spectrograph, FWHM=25 keV, angular distribution data from  $60^\circ$  to  $140^\circ$ .

**1976Ba06:**  $E\alpha=13\text{-}24$  MeV. Split-pole spectrograph and position-sensitive detectors, FWHM=40 keV, excitation functions measured at  $\theta(\text{lab})=130^\circ$ .

**1971Kr10:**  $E(\text{p})=16$  MeV. Si(Li) detectors, FWHM=40 keV, angular distribution data from  $50^\circ$  to  $165^\circ$ , absolute cross sections.

$^{188}\text{Os}$  Levels

E(level)	$J^\pi$ <sup>†</sup>	Comments
0	$0^+$	
155	$2^+$	$\beta_2(\text{Coulomb})=0.191$ , $\beta_2(\text{nuclear})= 0.132, 0.149, 0.145$ ( <b>1976Ba06</b> ) from interference data. $\beta_2(\text{Coulomb})=0.22$ ( <b>1971Kr10</b> ) from $\sigma(\theta)$ data. $\beta_2=0.218$ ( <b>1976Ba06</b> ) from $E(\alpha)=13$ MeV data.
478	$4^+$	$\beta_4(\text{Coulomb})=-0.031$ , $\beta_4(\text{nuclear})=-0.080, -0.028$ ( <b>1976Ba06</b> ) from interference data. $\beta_4=-0.237$ ( <b>1976Ba06</b> ) from $E(\alpha)=13$ MeV, sub-Coulomb data.
633	$2^+$	
940	$6^+$	
965	$4^+$	
1280	$4^+$	<b>1978Bu21</b> analyze $\sigma(\theta)$ and absolute cross section data by assuming the population of this level through successive E2 excitations, direct E4 excitation and coherent mixture of both mechanisms. Agreement was obtained by considering a significant contribution from direct E4 excitation. $\beta_4=0.027$ ( <b>1978Bu21</b> ).
1414	$(3^-)$	

<sup>†</sup> From Adopted Levels.