

Table 10.28 from (2004TI06):  
Transition strengths and radiative widths from  $^{10}\text{B}(e, e')$  <sup>a</sup>

$E_x$ (MeV)	$J^\pi; T$	Mult.	$B(\lambda) \uparrow$ $e^2 \text{ fm}^{2\lambda}$	$B(\lambda) \downarrow$ (W.u.)	$\Gamma_{\gamma_0}$ (eV)
0.72	$1^+; 0$	C2	$1.71 \pm 0.14$	$3.12 \pm 0.26$	$(6.1 \pm 0.5) \times 10^{-7}$
1.74	$0^+; 1$	M3	$7.00 \pm 0.20$ <sup>b</sup>	$125 \pm 4$	$(8.90 \pm 0.26) \times 10^{-10}$
2.15	$1^+; 0$	C2	$0.41 \pm 0.05$	$0.75 \pm 0.08$	$(3.6 \pm 0.4) \times 10^{-5}$
3.59	$2^+; 0$	C2	$0.62 \pm 0.05$	$0.67 \pm 0.05$	$(4.1 \pm 0.3) \times 10^{-4}$
5.16 <sup>c</sup>	$2^+; 1$	M3	$19.4 \pm 1.3$	$69.2 \pm 4.6$	$(1.00 \pm 0.07) \times 10^{-6}$
5.92	$2^+; 0$	C2	$0.15 \pm 0.05$	$0.16 \pm 0.06$	$(1.2 \pm 0.4) \times 10^{-3}$
6.03	$4^+; 0$	C2	$18.7 \pm 0.7$	$11.4 \pm 0.4$	$(9.3 \pm 0.4) \times 10^{-2}$
6.13	$3^-; 0$	C3 <sup>d</sup>	$33.0 \pm 3.8$	$5.6 \pm 0.7$	$(4.0 \pm 0.5) \times 10^{-6}$
6.56	$4^-; 0$	C3 <sup>e</sup>	$21.7 \pm 3.1$	$2.8 \pm 0.4$	$(3.3 \pm 0.5) \times 10^{-6}$
7.48 <sup>f</sup>	$2^+; 1$	M1	$0.018 \pm 0.002$	$1.27 \pm 0.14$	$11.0 \pm 1.2$

<sup>a</sup> From (2004MIZX, analysis using polynomial times Gaussian fits to data from (1966SP02, 1976FA13, 1979AN08, 1995CI02). Distortion effects are taken into account by using  $q_{\text{eff}} = q(1 + 2.75/E_0)$  where  $E_0$  is the incident electron energy in MeV (1995CI02).

<sup>b</sup> From a full DWBA analysis (R.S. Hicks, private communication).

<sup>c</sup> Assumed to correspond to  $2^+$  state at 5.164 MeV.  $F_T^2$  at  $q_{\text{eff}} = 1.32 \text{ fm}^{-1}$  for the transition to the  $2^-$  state at 5.110 MeV is an order of magnitude smaller than  $F_T^2$  for the 5.164 MeV level (1995CI02). A small M1 contribution at low  $q$  has been subtracted.

<sup>d</sup> Shell-model calculations predict a dominant C3 contribution and a smaller C1 contribution (1995CI02).

<sup>e</sup> Shell-model calculations predict a dominant C3 contribution (1995CI02).

<sup>f</sup> Using the low- $q$  data from (1966SP02, 1976FA13). In this evaluation, we have adopted a  $2^-$  assignment for the 7.48 MeV state. However, see Tables 10.18 and 10.20 for a nearby  $2^+$  level.