

$\gamma_{c,m} \rightarrow$ $\gamma_{r,g}$ $\downarrow$	2	6	10	14
2	10,18,16	14,18,16	18,18,16	22,18,16
6		12,18,12	16,18,12	20,18,12
10		10,18,8	14,18,8	18,18,8
14			12,18,4	16,18,4

**Supplementary table 1. J values of the parameter space of figure 3 and supplementary figure 2.**

The order of the values is  $J_{c,m}$  ,  $J_{r,g}$  ,  $J_{r,r}$ .