

**Supporting information for:**

**DNA-Protected Silver Emitters: Charge  
Dependent Switching of Fluorescence**

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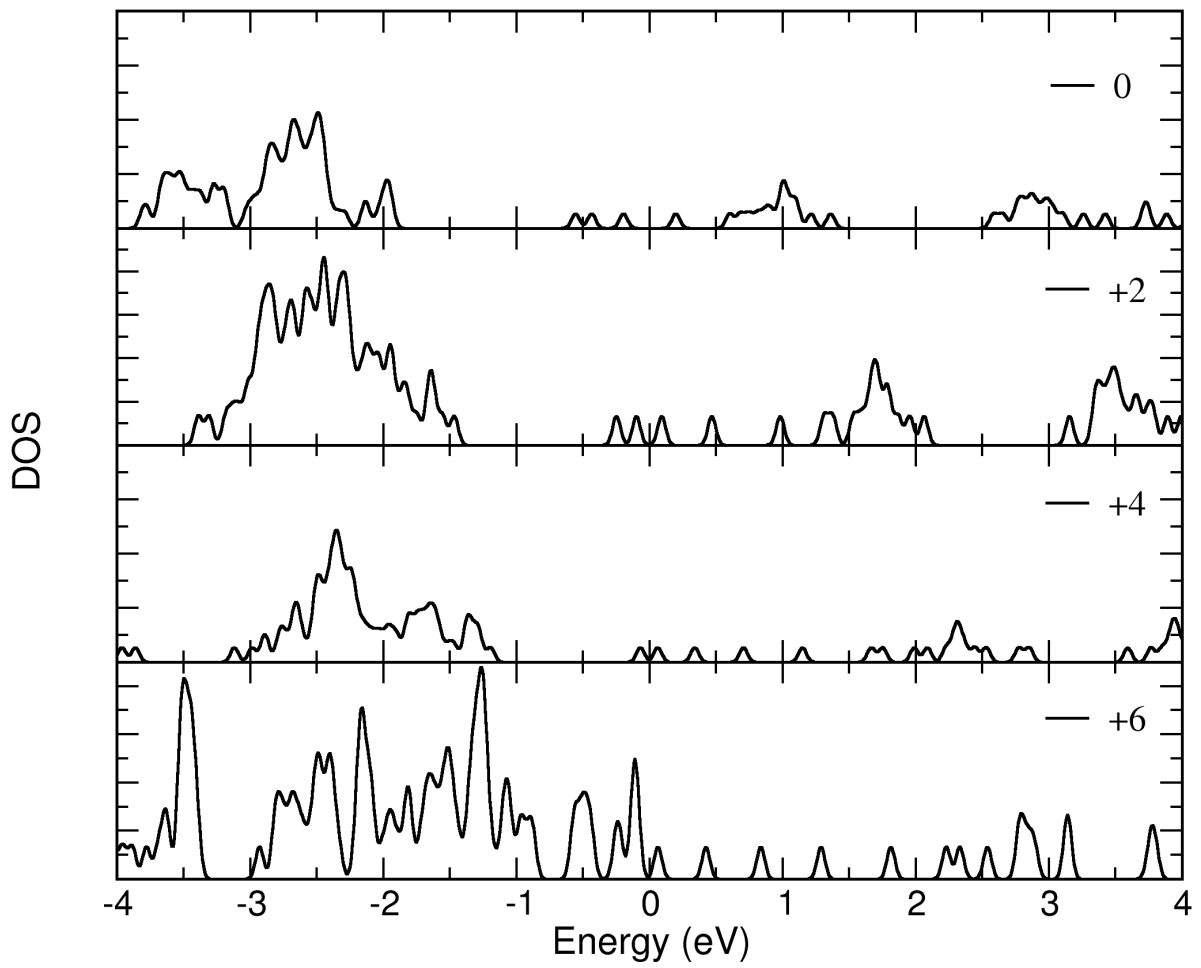


Figure S1: Density of states (DOS), as function of the total charge for  $((C_2Ag)_6)$  structure

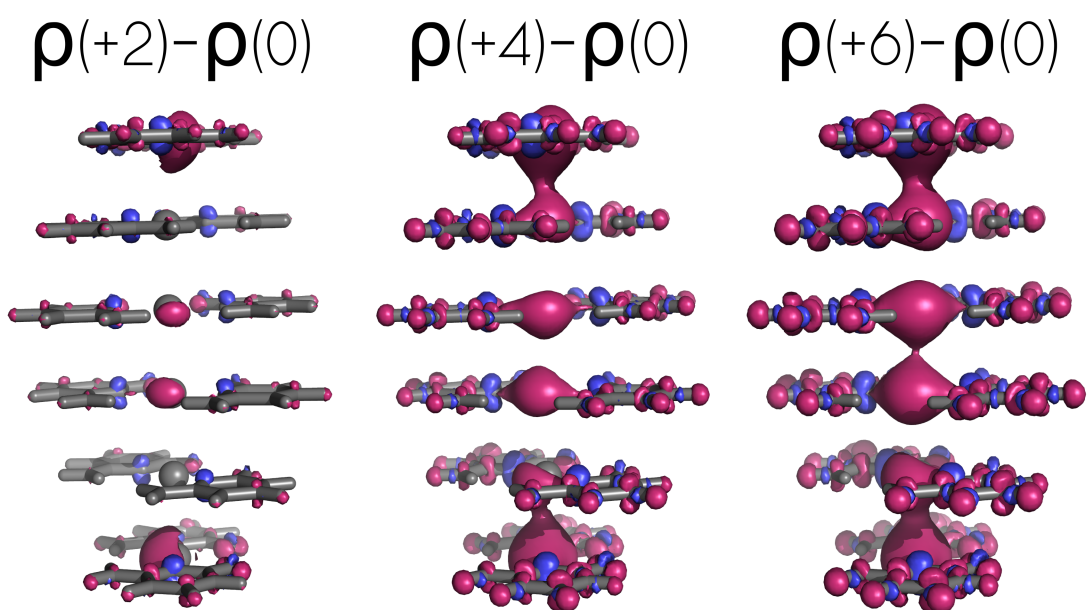


Figure S2: Total charge density difference between charged and neutral system, and its evolution as the charge of the system increases. Charge accumulation and charge depletion lobes are represented with blue and red colors respectively.

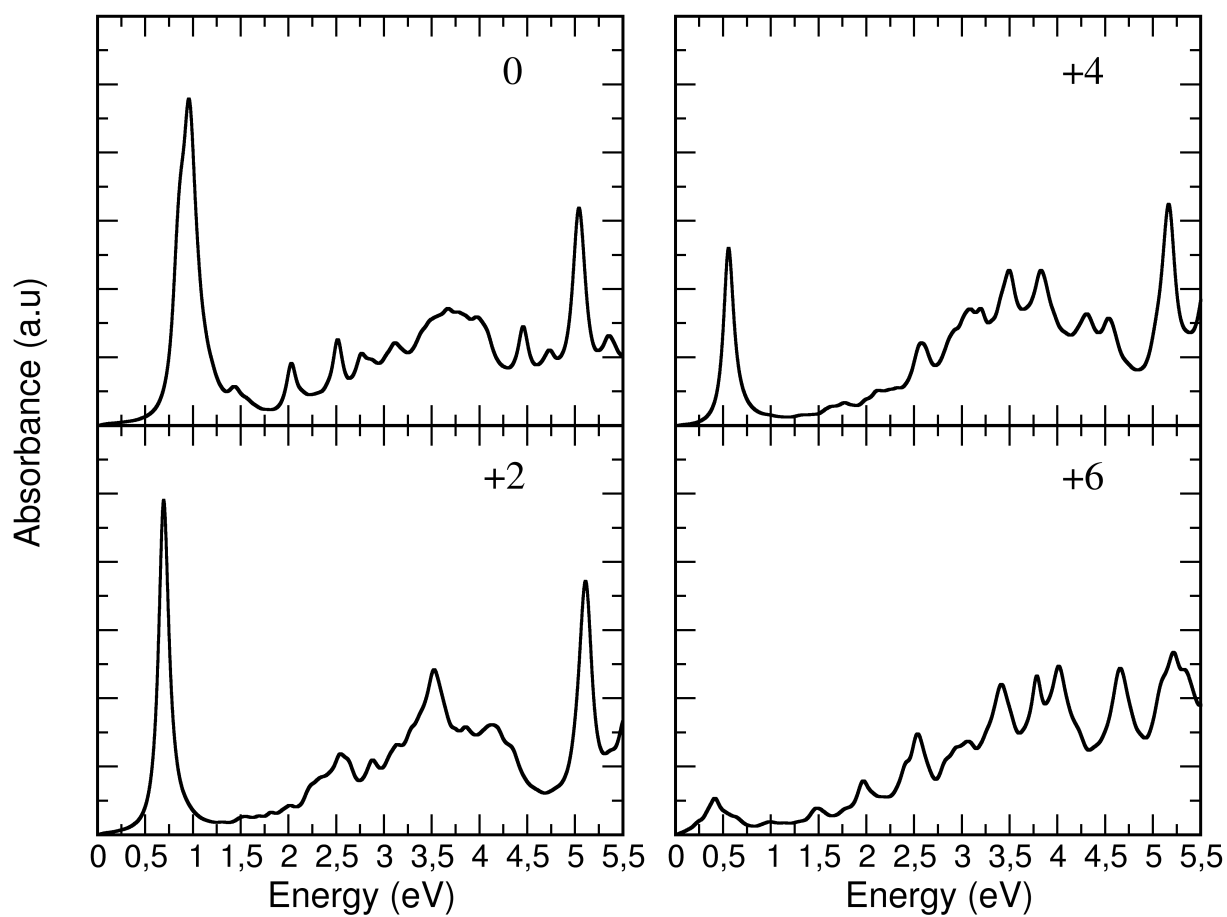


Figure S3: Absorption spectra obtained for  $((C_2Ag)_6)$  as function of the total charge.

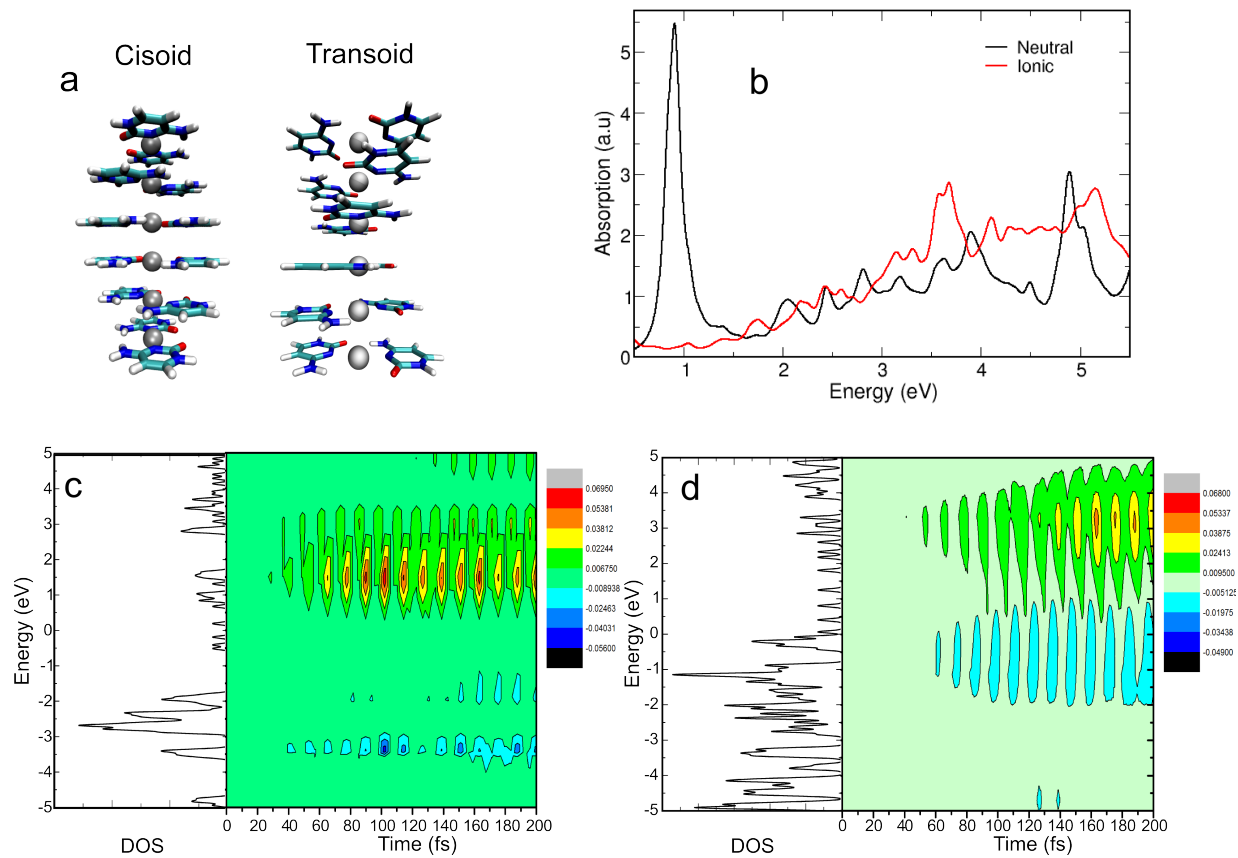


Figure S4: (a) Comparison of the cisoid/transoid structures of  $((C_2Ag)_6)$ . (b) Absorption spectra obtained for transoid  $((C_2Ag)_6)$  and  $((C_2Ag)_6)^{+6}$  in black and red line respectively. (c and d) Dynamic orbital population obtained for transoid  $((C_2Ag)_6)$  and  $((C_2Ag)_6)^{+6}$  under UV irradiation at 4.9 eV and 5.1 eV, respectively.