

Supporting information for

Protein confinement fine-tunes the aggregation-  
induced emission in the human serum albumin

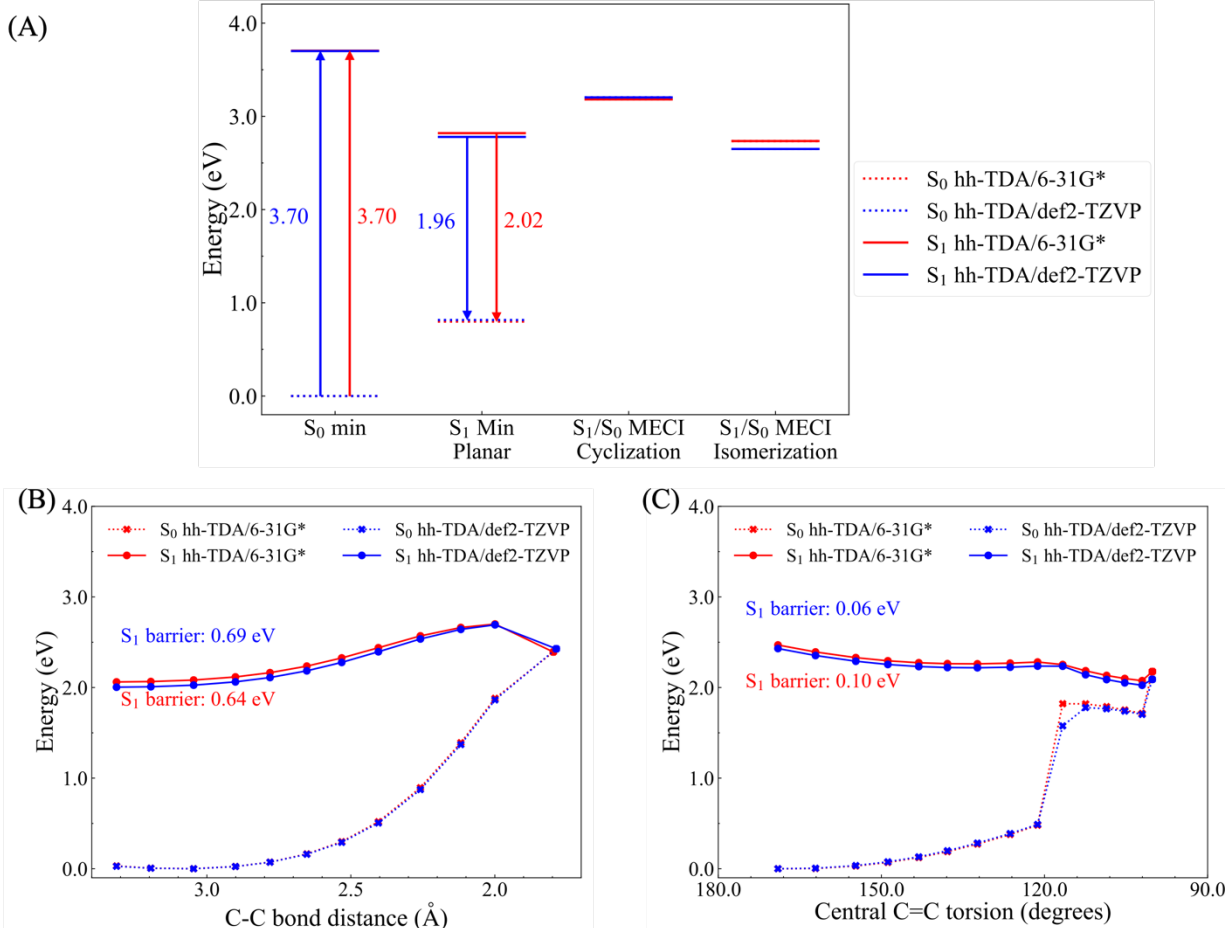
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**Figure S1.** The hh-TDA-BHLYP PES of the TPE-2TA in the vacuum comparing the 6-31G\* (red) vs. def2-TZVP (blue) basis sets. For both basis sets, the isomerization is energetically preferred over the cyclization. (A) The  $S_0$  and  $S_1$  states' energies corresponding to the critical points, including the  $S_0$  and  $S_1$  states' minima ( $S_0$  min and  $S_1$  min) and the two  $S_0/S_1$  MECIs encountered in the isomerization and cyclization pathways. The excitation and emission energies at  $S_0$  and  $S_1$  min are labeled by arrows. (B) PES along the C-C bond distance in the cyclization pathway. (C) PES along the torsion around the central ethylenic C=C bond for the isomerization pathway. The largest  $S_1$  state energy barriers along each pathway are indicated. The solid and dotted lines indicate the  $S_1$  and  $S_0$  states, respectively. The zero-reference energy is taken as the lowest  $S_0$  state energy. The critical points and geometries along the pathways are optimized for each basis set.