

# SUPPORTING INFORMATION

Effect of Molecular Symmetry on the Spectra and Dynamics of the Intramolecular Charge Transfer (ICT) State of Peridinin

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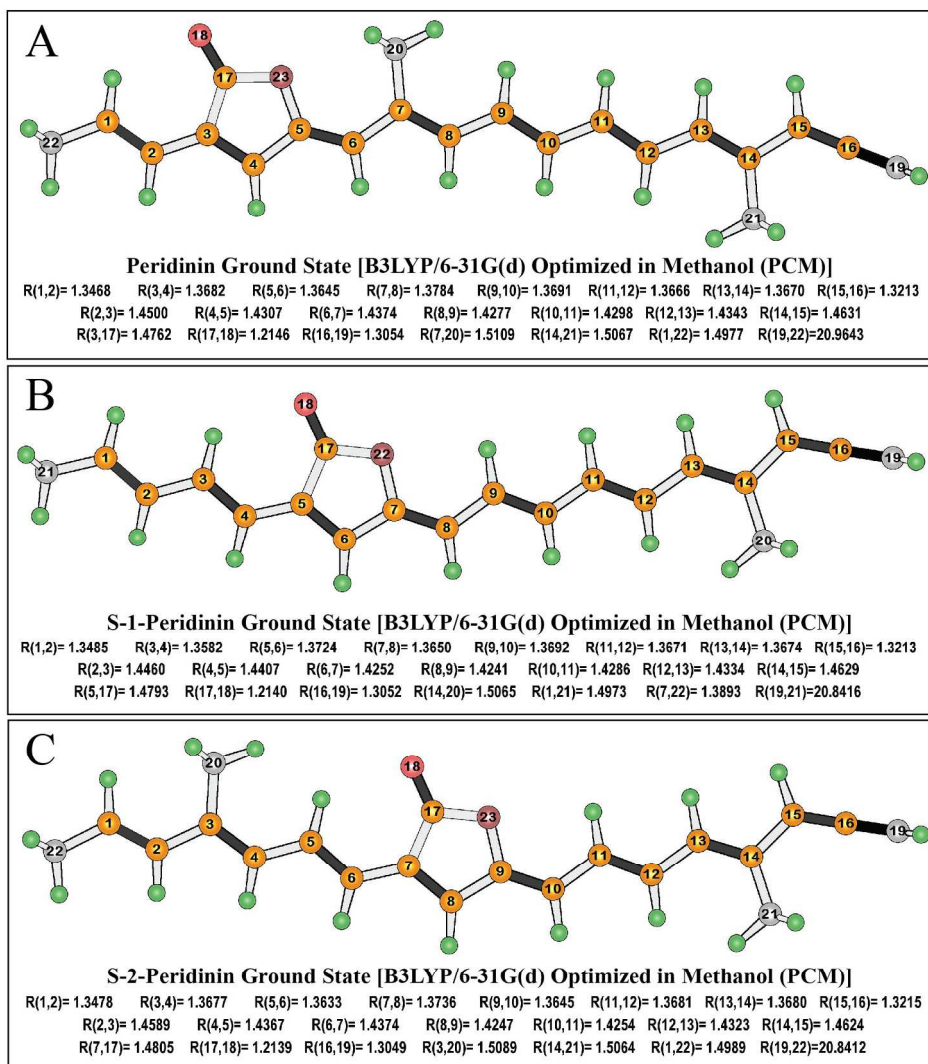


Figure S1. Comparison of the ground states of the model compounds in methanol based on DFT (B3LYP/6-31G(d)) methods (see theoretical). Selected bond lengths in Ångstroms are listed below each structure.

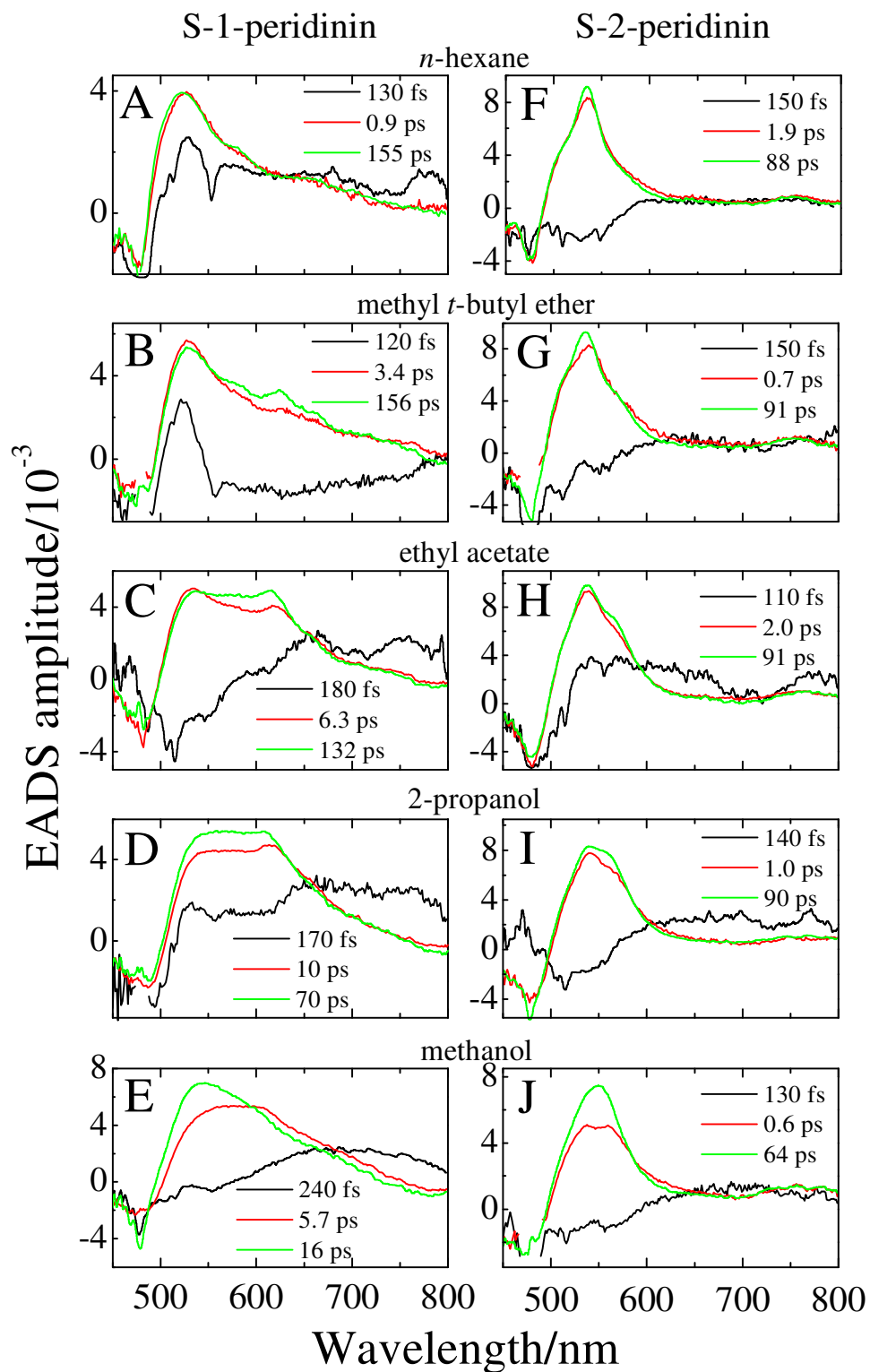


Figure S2. Global analysis of the transient absorption datasets shown in [Fig. 3](#) fit to a sequential (EADS) decay model.

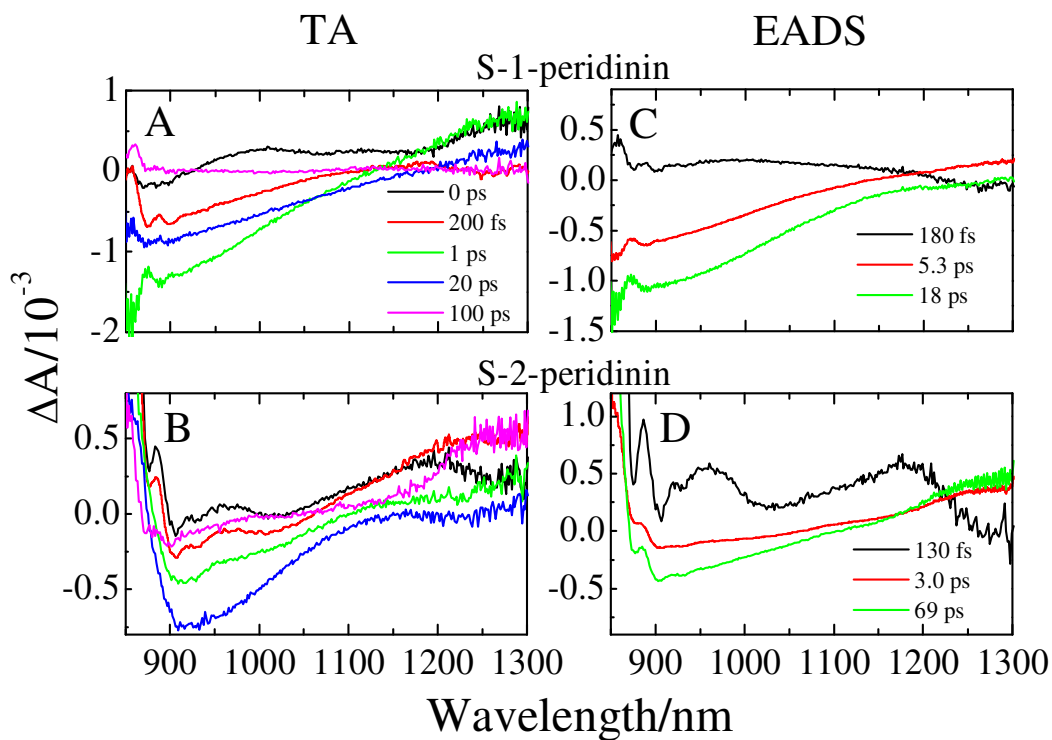


Figure S3. Transient absorption (TA) spectra in the NIR region of (A) S-1-peridinin and (B) S-2-peridinin measured in methanol at room temperature at 0, 0.2, 1, 20 and 100 ps time delays. The excitation wavelength of the samples was 483 nm. (C) and (D) show the results of a global analysis of transient absorption data in (A) and (B) fit to a sequential (EADS) decay model.