Electronic Supplementary Material (ESI) for Physical Chemistry Chemical Physics.

Supporting Information
Accurate calculation of optically induced birefringences in chiral systems using efficient polarized basis sets

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FIG. 1: CCSD basis set convergence of the medium constants in asymmetric methane. λ= 632.8 nm, P= 1 atm, and T= 273.15 K. The wavelength is the same for the pump and the probe beams. Units are m^2V^{-2}. Symbol aVXZ denotes the aug-cc-pVXZ (X= D, T, Q, 5) series of bases, and daVXZ the d-aug-cc-pVXZ (X= D, T, Q, 5) one.

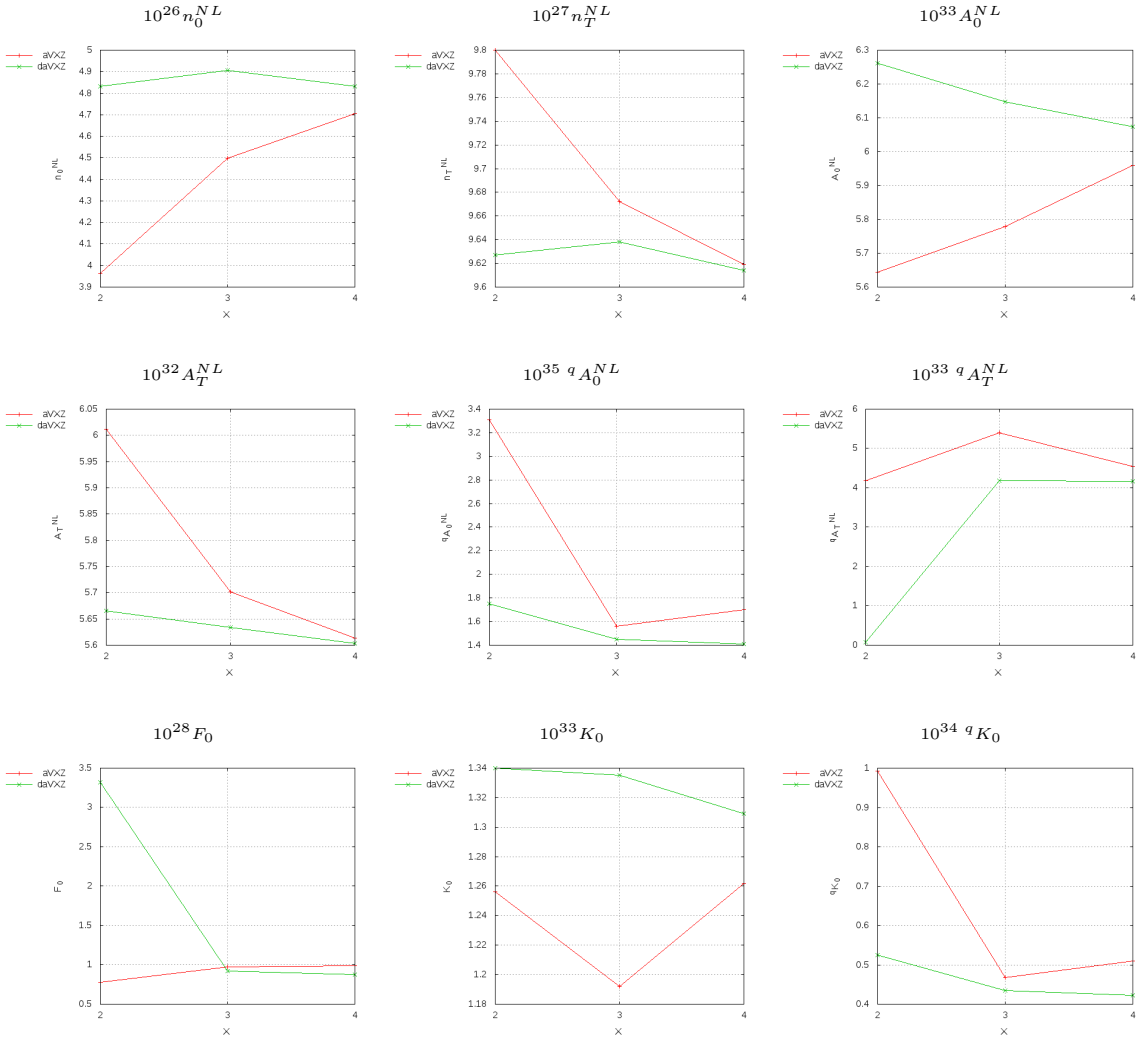

FIG. 2: DFT/B3LYP basis set convergence of the medium constants in asymmetric methane. λ= 632.8 nm, P= 1 atm, and T= 273.15 K. The wavelength is the same for the pump and the probe beams. Units are m^2V^{-2}. Symbol aVXZ denotes the aug-cc-pVXZ (X= D, T, Q, 5) series of bases, daVXZ the d-aug-cc-pVXZ (X= D, T, Q, 5) one, and "reference" the CCSD/d-aug-cc-pVQZ results.