Abstract Submitted
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Hypo/hyperchromy in orthorhombic molecular crystals: Fluorene, and Dibenzofuran[1] ZAHRA NASROLLAHI, Department of Physics, University of Florida, Gainesville, Florida 32611, USA, LENINA NAKHIMOVSKY, Chemistry Department, Stony Brook University, Stony Brook, NY 11794, USA, JOHN TRUNK, Biology Department, Brookhaven National Laboratory, Upton, NY 11973, USA, D.B. TANNER, Department of Physics, University of Florida, Gainesville, Florida 32611, USA — The transmission of Fluorene and Dibenzofuran molecular crystals was measured over the near ultraviolet to vacuum ultraviolet (4-10 eV) range at the National Synchrotron Light Source. Polarized spectra were measured for both a and b crystallographic axes, and the spectrum in the c direction was found using the spectrum of a 40° rotated sample. Oscillator strengths were calculated by fitting the data to the Drude-Lorentz model. Comparison of the oscillator strength in the gas phase and in crystal show significant differences. These differences are attributed to the effect of intermolecular interaction in these molecular crystals.

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