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DEPARTMENT OF PHYSICS

**Optical characterization of Anthracene single
Crystals using Raman and Fluorescence spectroscopy**

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ABSTRACT

In this work anthracene single crystals were investigated using Raman and Fluorescence spectroscopy at room temperature. The excitation beam's wavelength was centered at 532 nm for Raman and 375 nm for fluorescence spectroscopy respectively. A prominent Raman peak was observed at around 1402 cm^{-1} which was assigned to C=C stretching mode and the fluorescence spectra exhibited a vibrational progression which peaked at around 446 nm.

