

Supporting information for: “Pyrite Nanocrystals: Shape-Controlled Synthesis and Tunable Optical Properties via Reversible Self-Assembly”

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Fourier transformed infrared (FTIR) spectra

FTIR spectra of powders (Fig. S1) and thin films (Fig. S2) of pyrite nanodendrites were recorded in the region of the antisymmetric (2955 and 2921 cm^{-1}) and symmetric (2850 cm^{-1}) C-H-stretching vibrations in the aliphatic alkyl chains of the ligands. The reduced intensities for these vibrations for aggregated nanodendrites and sintered films samples as compared to isolated nanodendrites and as-prepared films supports the attribution of ligand removal as detailed in the main article.

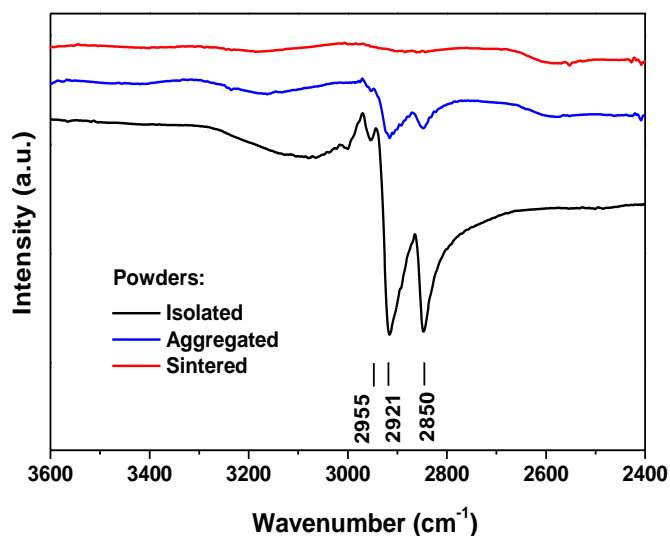


Figure S1. FTIR spectra of powders from isolated, aggregated, and sintered nanodendrites in the spectral region of vibrations in the ligand molecules demonstrating ligand removal.

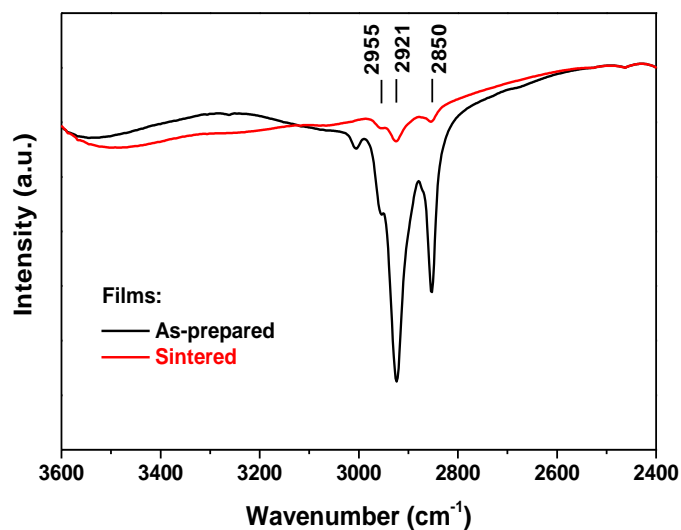


Figure S2. FTIR spectra of as-prepared and sintered films from pyrite nanodendrites nanodendrites in the spectral region of vibrations in the ligand molecules demonstrating ligand removal.