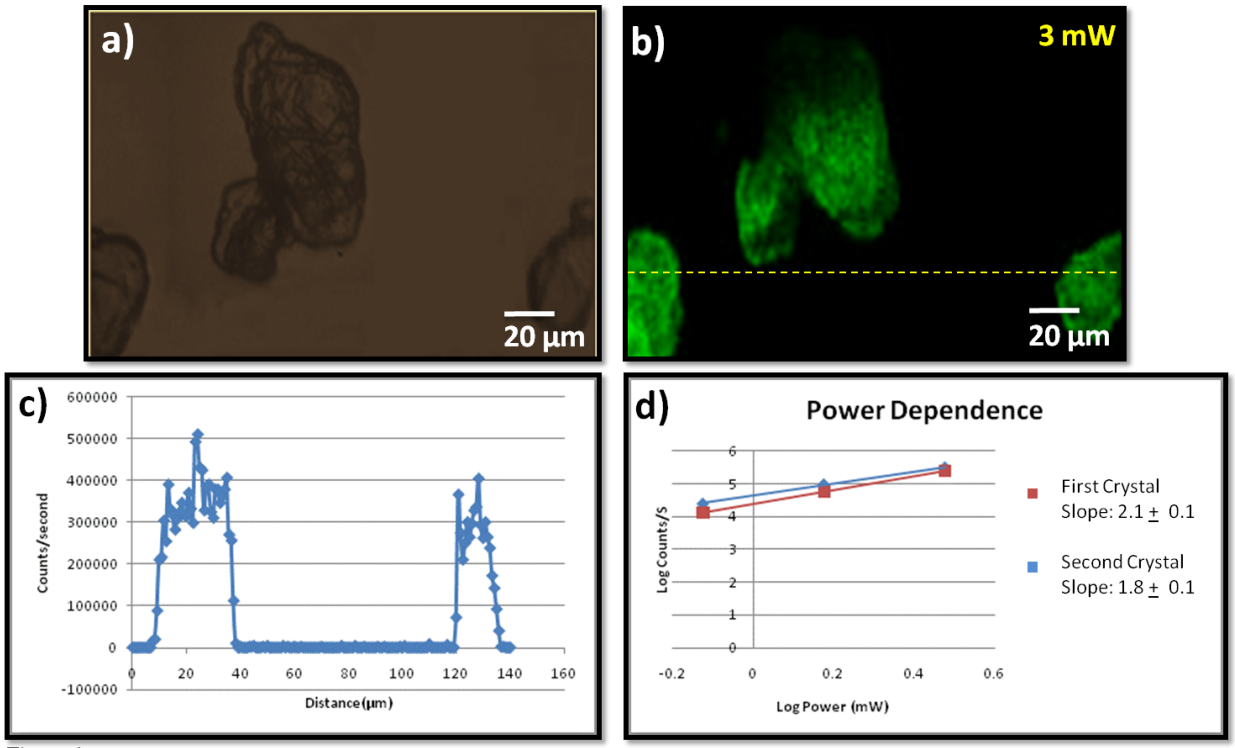

Figure 6

Initial TPE-UVF studies of L-tryptophan: a) bright field and b) TPE-UVF image of L-tryptophan powder c) Line scan analysis of tryptophan powder, corresponding to the yellow line in b), indicating bright signal at low laser fluence, with d) power-dependent measurements demonstrating a logarithmic slope of two, consistent with a two-photon excitation process.

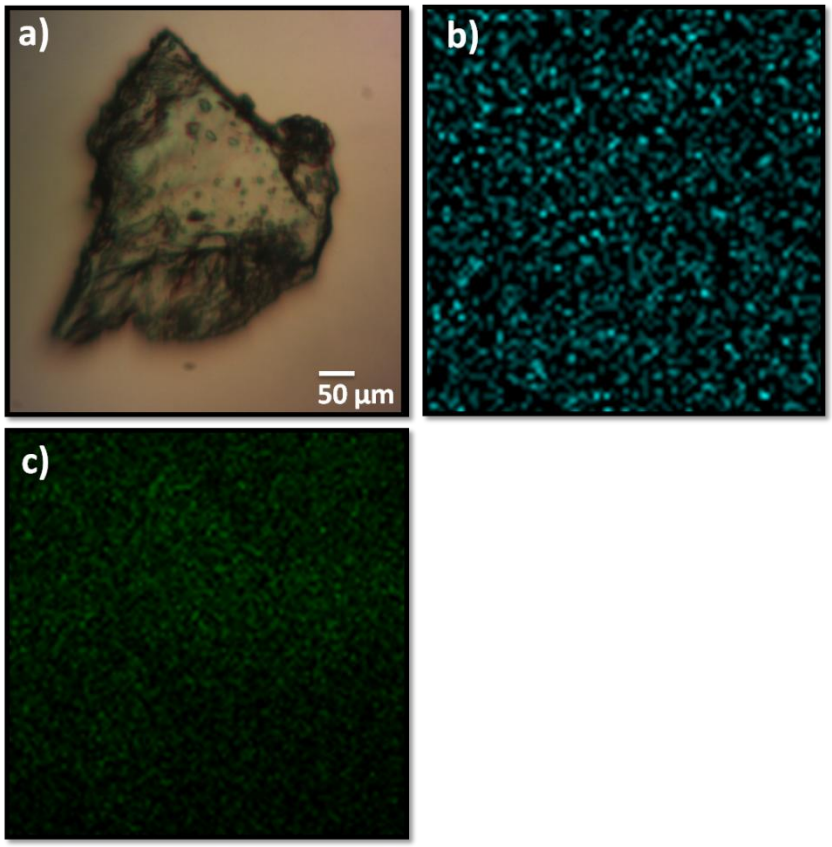

Figure 7

Complementary detection for salt crystal discrimination: a) bright field, b) SONICC, and c) TPE-UVF of a sodium citrate dihydrate crystal. No signal was generated from either technique, as sodium citrate adopts an SHG inactive space group under ambient conditions and contains no fluorescent aromatic groups, allowing discrimination between simple salts and protein crystals.

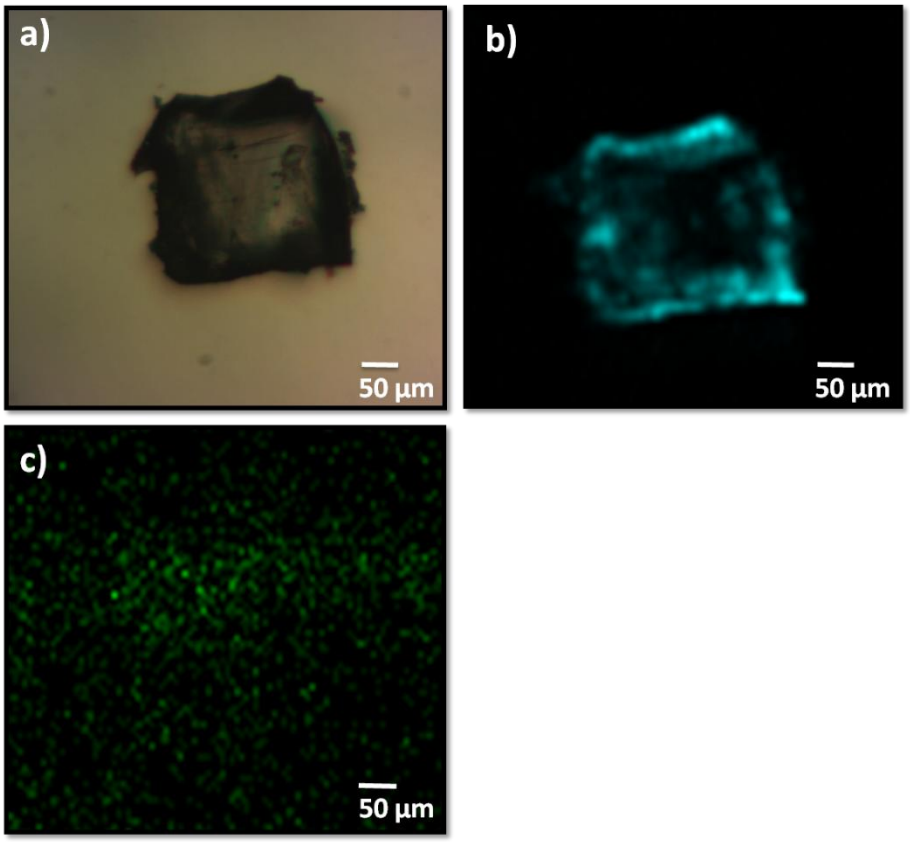

Figure 8

Reduction of false positives by complementary measurements: a) bright field, b) SONICC, and c) TPE-UVF of a potassium sodium tartrate crystal. Though bright SHG signals are evident, TPE-UVF measurements illustrate a lack of aromatic groups, allowing the sample to be distinguished from that of a protein crystal.