

Title: Development of in-situ laser diagnostics measurements of CH₃ radical concentrations for study of thin film depositions using organo-metallic precursors

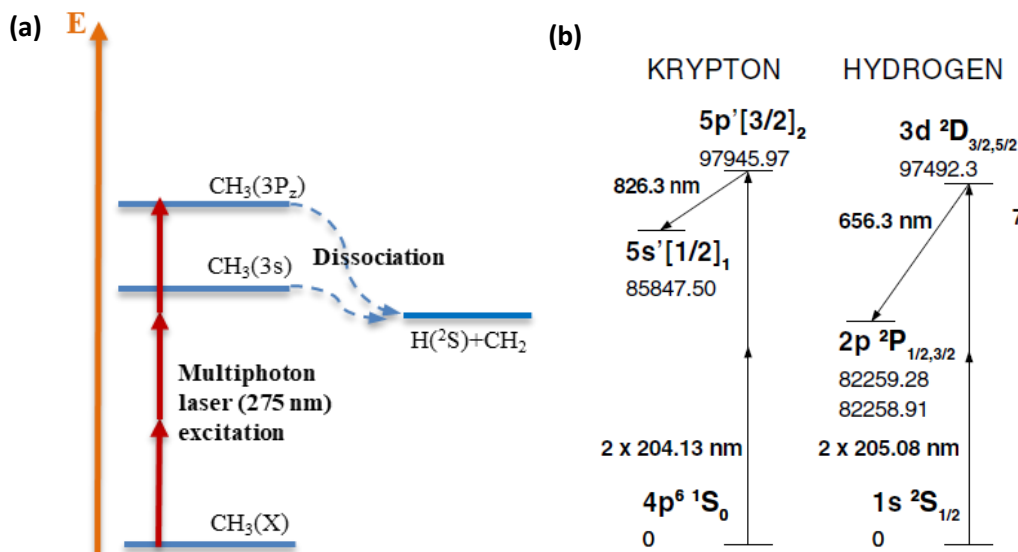


Fig. 1: (a) CH₃ radical is predissociated using 275 nm femtosecond laser and the H atoms created are measured using Two Photon Laser Induced Fluorescence (TALIF) of H scheme shown in (b). CH₄+ Ar flow is used for the studies.

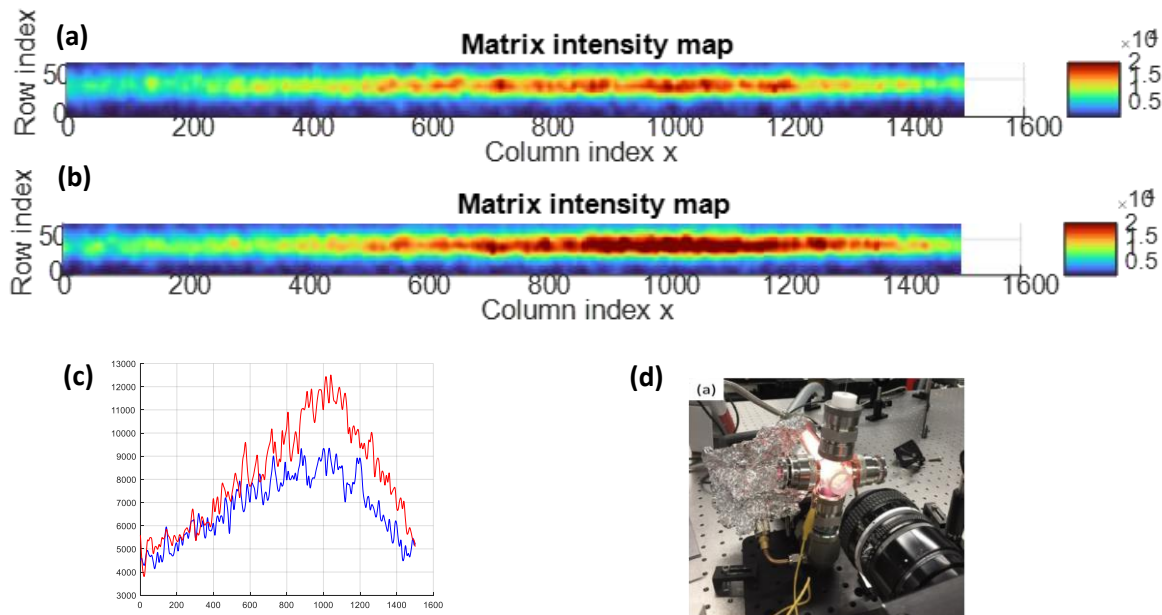


Fig. 2: (a) and (b) show the H TALIF intensity images, without and with, 275 nm predissociation laser, showing increased H atom signals with predissociation; (c) plot of the column averaged intensity in (a, blue) and (b, red) of the TALIF signal; (d) shows a picture of the experimental setup.