OBSERVATION AND ANALYSIS OF BOUND → FREE TRANSITION OF ScI_3 PHOTOEXCITED IN THE ULTRA-VIOLET

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Bound to free transitions of ScI were observed for the first time after photoexcitation of ScI_3 in the ultraviolet by 193 nm radiation from an ArF excimer laser. Broad fluorescence features typical of molecular transitions between different vibrational energy levels of Sc*+I have been measured in the near-infrared between 860 and 940 nm.
Many narrow spectral lines have also been observed, but were attributed to fluorescence of atomic Scandium or Iodine.
Experimental and simulation results will be compared and presented.