

SEARCH FOR THE LOW-LYING ELECTRONICALLY EXCITED STATES OF UO_2

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Low-lying electronically excited states of UO_2 were studied by laser excitation and dispersed fluorescence spectroscopy. Excitation of UO_2 in $31300\text{-}31800\text{ cm}^{-1}$ and 27100 cm^{-1} region produced highly congested emission spectrum. A search for the low-lying absorption bands was performed in the region of $10000\text{-}15000\text{ cm}^{-1}$ using two-color REMPI spectroscopy. Several band systems were found near 11500 , 12300 , 13100 and 13700 cm^{-1} .