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 31300-31800 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 10000-15000 cm^{-1} using two-color REMPI spectroscopy. Several band systems were found near 11500, 12300, 13100 and 13700 cm^{-1}.