RESONANT TWO-PHOTON IONIZATION SPECTROSCOPY OF JET-COOLED OSMIUM NITRIDE

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Optical transitions of supersonically cooled OsN were investigated for the first time in the range between 19, 231 and 22, 988 cm^{-1} by resonant two-photon ionization technique. Ten bands were rotationally resolved for the four largest isotopomers, $^{192}Os^{14}N$ (40.78%), $^{190}Os^{14}N$ (26.26%), $^{189}Os^{14}N$ (16.12%) and $^{188}Os^{14}N$ (13.24%).