

AUTOIONIZING RESONANCES
IN THREE-PHOTON IONIZATION SPECTRUM
OF THE YTTERBIUM ATOM

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S u m m a r y

The three-photon ionization spectrum of ytterbium atoms in the interval $16814.4\text{--}18100.0\text{ cm}^{-1}$ has been studied. In addition to the resonance maxima related to the one- and two-photon excitations of bound states, the maxima originated from the three-photon excitation of autoionizing states are observed. Two new odd autoionizing levels with energies of 51866.1 and 51914.1 cm^{-1} are discovered.