

High resolution spectroscopy with an optical frequency comb II

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For high resolution spectroscopy of excited states of polyatomic molecules, a precise scale of optical frequency plays an important role. In the present study, we use a 1 octave optical frequency comb as the scale. We combine it with the Doppler-free two-photon absorption spectroscopy to measure precise molecular transition frequencies.

3 MHz 10^{-8}

[1]

1

1

1

f_{rep}

f_{CEO}

f_{CEO}

[2]

2

rep [MHz]
100.000 000
99.999 988

