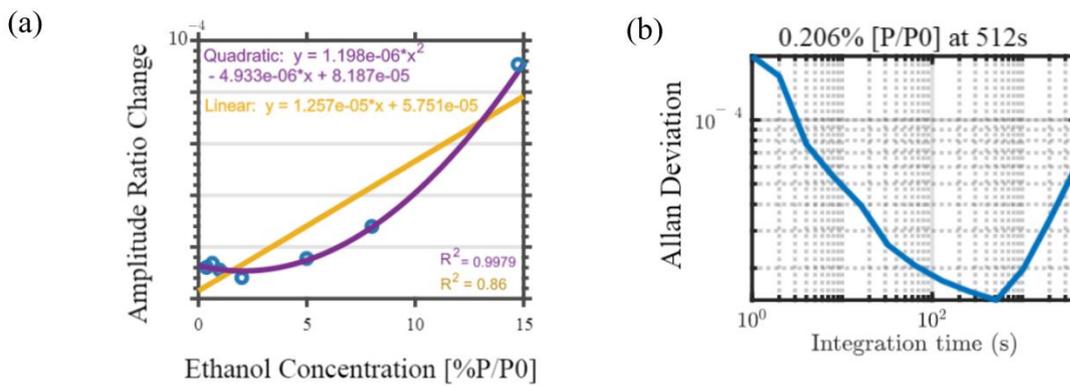


**Figure S1.** The frequency response of resonator 1 (a) and resonator 2 (b) with different coupling capacitance values.



**Figure S2.** The linear and quadratic fitting of the average baseline AR to minimum AR change (a) and the Allan deviation (b) of the amplitude ratio.