

# An approach to ring resonator biosensing assisted by dielectrophoresis: Design, simulation and fabrication

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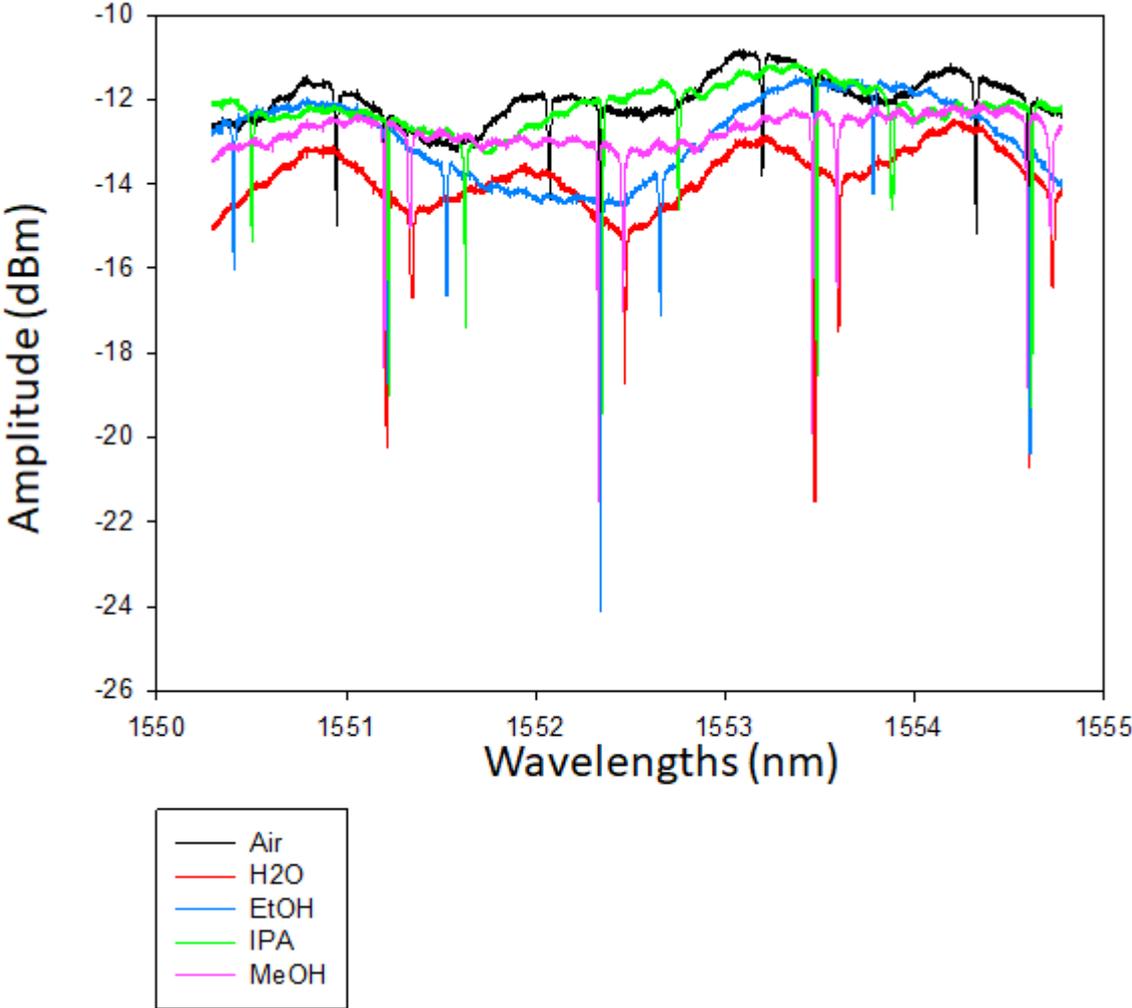


Figure 1. Typical transmission spectrum of ringresonators with coplanar electrode configuration.

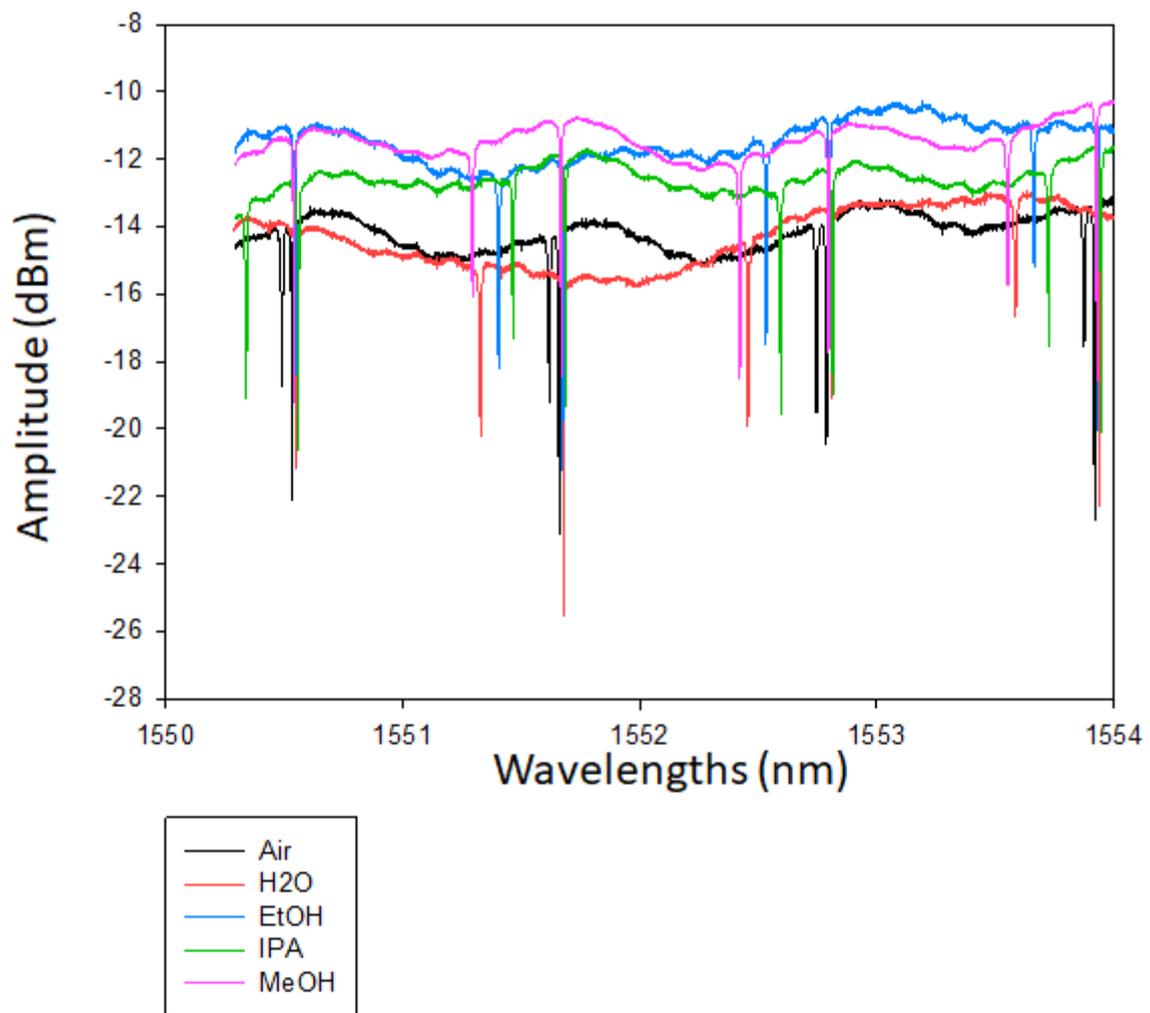
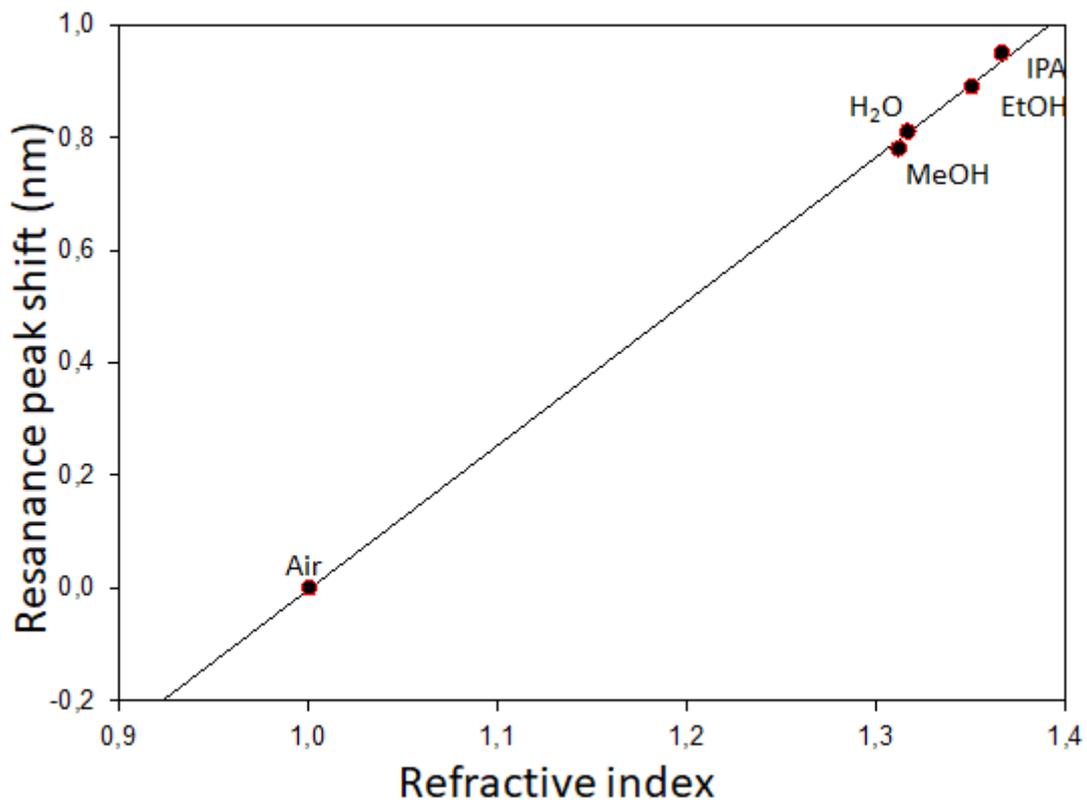


Figure 2. Typical transmission spectrum of ring resonator with top-bottom electrode configuration.



**Figure 3.** The resonance peak shift of the ring resonators with coplanar electrodes exposed to MeOH ( $n = 1.3118$ ), H<sub>2</sub>O ( $n = 1.3164$ ), EtOH ( $n = 1.3503$ ), and isopropanol ( $n = 1.3661$ ) normalized to the peak position in air.