## Supplementary information:

## Impact of silanization parameters and antibody immobilization strategy on binding capacity of photonic ring resonators

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Figure S1: Schematic illustration of possible APTES configurations after silanization.

**Figure S1.** Schematic illustration of possible APTES configurations after silanization, (**a**); surface attachment and condensation, (**b**); multilayer formation and (**c**); hydrogen bonding.

Figure S2: Surface roughness of plasma cleaned silicon oxide wafer



**Figure S2.** (a); AFM topograph of a plasma cleaned silicon oxide substrate. (b); The average surface roughness of plasma cleaned silicon oxide substrates as exemplified in (a). The average is calculated based on four separate areas imaged on each of four samples.