**Table S1. Thickness of ns-$TiO_2$ films measured by AFM and stylus profilometer**

The thickness values measured by AFM and stylus profilometer [1] agree within the experimental error and are very close to the nominal values (h = 50, 100, 200, 300 nm).

| Sample | Nominal thickness (nm) | Thickness by Profilometer (nm) | Thickness by AFM (nm) |
|---|---|---|---|
| SMP1 | 50 | 64.1 ± 6.4 | 54 ± 6 |
| SMP2 | 100 | 115.9 ± 8.8 | 105.2 ± 3.9 |
| SMP3 | 200 | 197 ± 6.8 | 202 ± 5.1 |
| SMP4 | 300 | 309 ± 7.3 | 296.7 ± 5.5 |