

## Supplementary Data

Article

# Visible-Light Photocatalyst to Remove Indoor Ozone under Ambient Condition

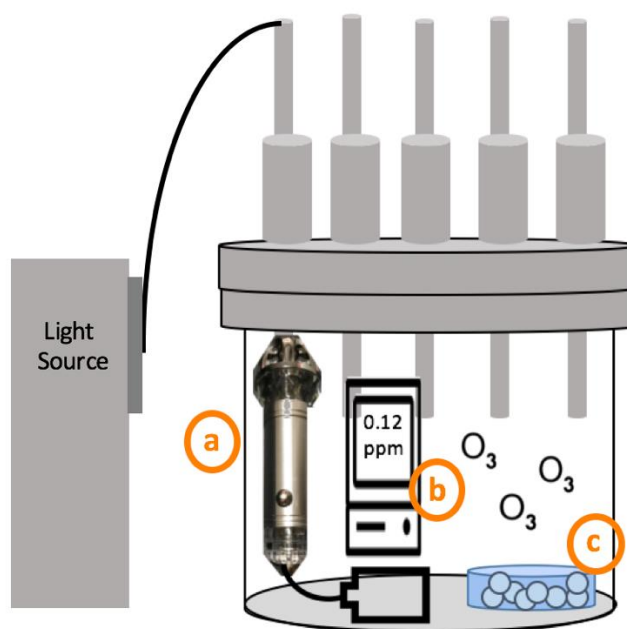
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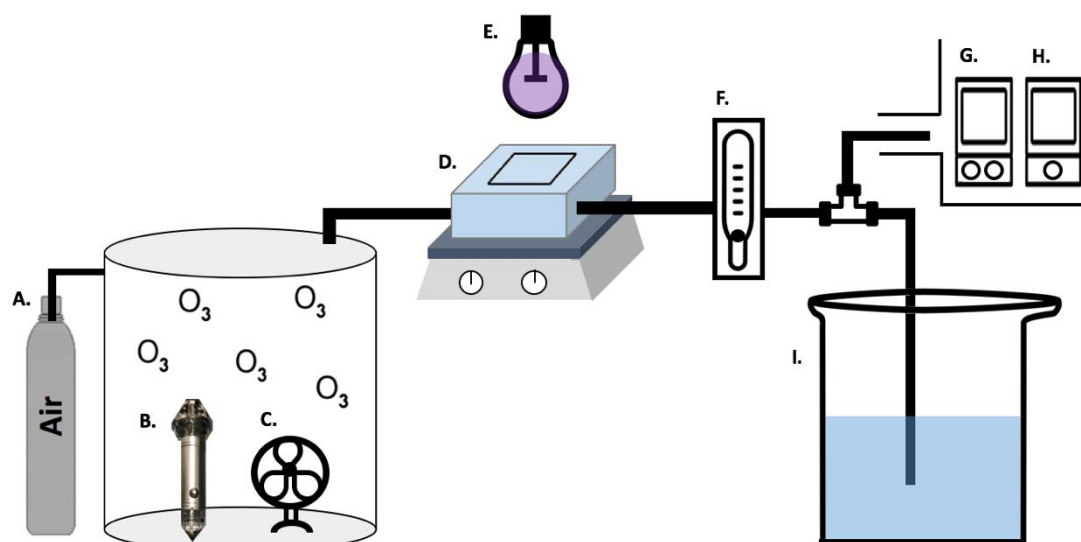
<sup>2</sup> Department of Atmospheric Sciences, National Taiwan University, Taipei 10617, Taiwan;

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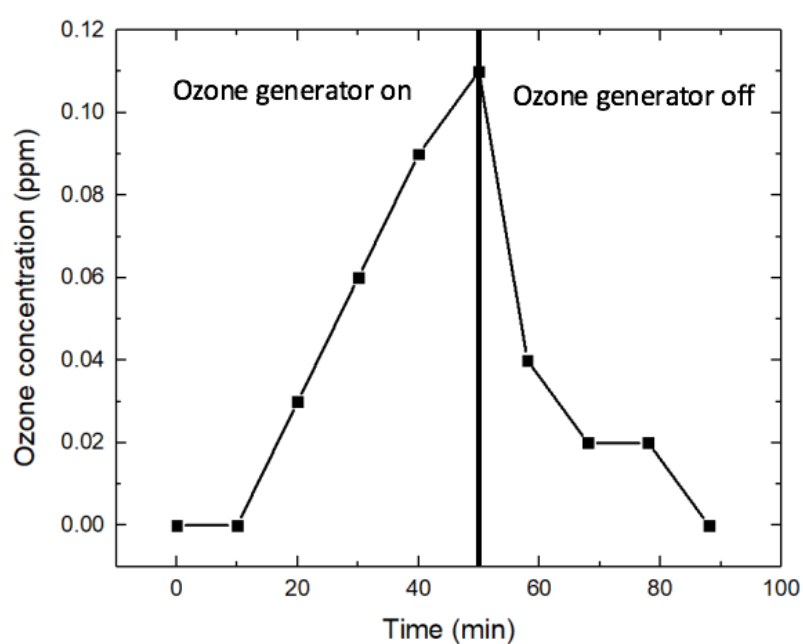
## Supplementary information



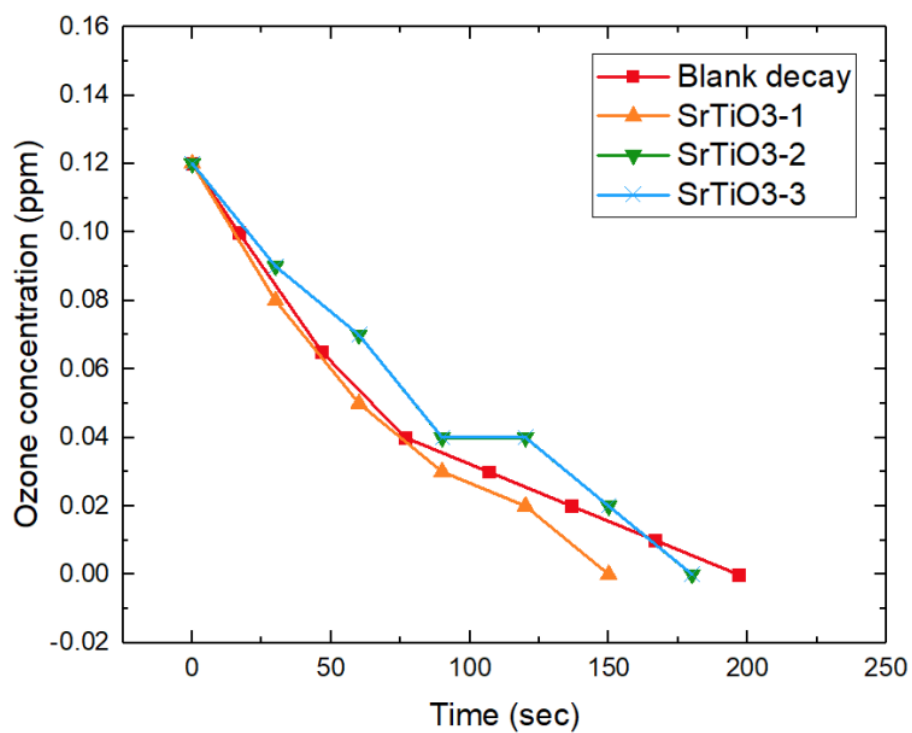
**Figure S1.** Schematic setup of the ozone photodecomposition batch system. The alphabets represent the following: a. ozone producer, b. ozone detector, c. photocatalyst.



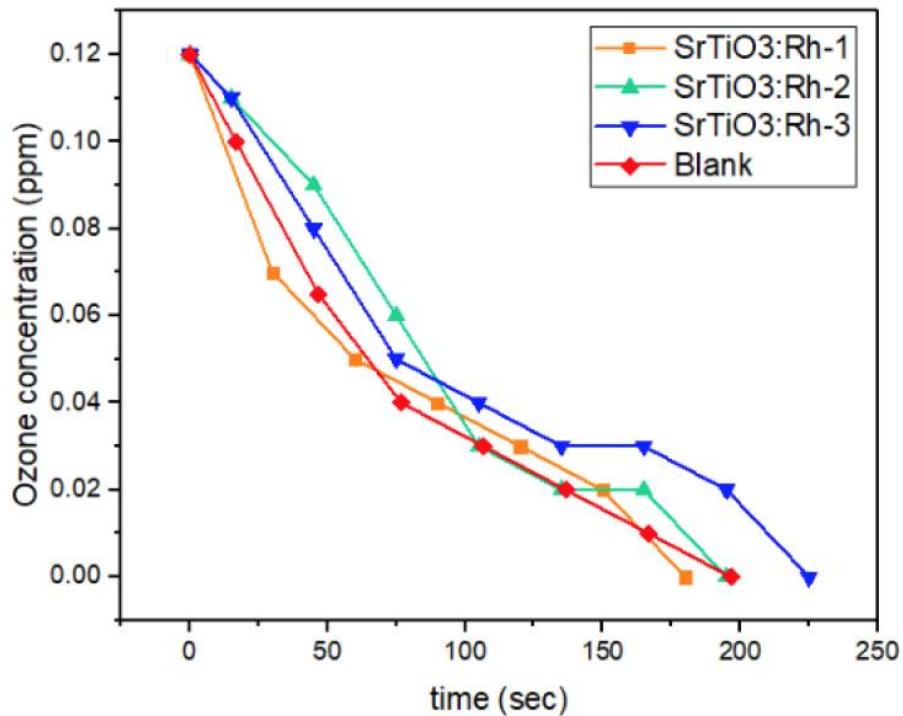
**Figure S2.** Schematic diagram of the continuous flow system. A. Air cylinder. B. Ozone Producer. C. Agitator. D. Plug flow reactor. E. Light source. F. Rotameter. G. Ozone detector. H. Hygrometer and thermometer. I. Ozone discharge beaker.



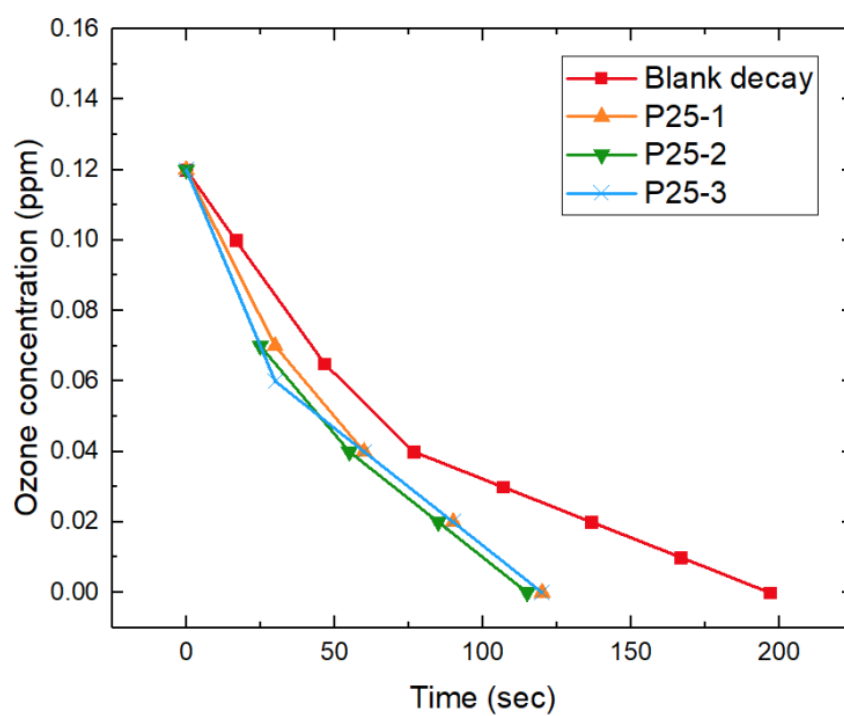
**Figure S3.** Natural decay of ozone in batch system (no catalyst, no light source). The vertical line indicates the time which the ozone generator is switched off.



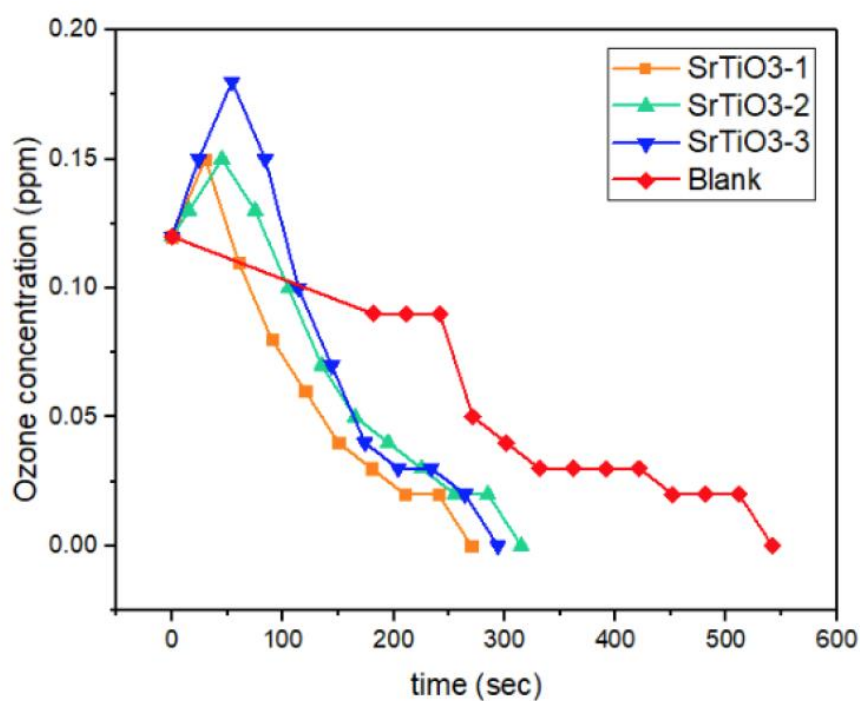
**Figure S4.** Photocatalytic decomposition of ozone in batch system by SrTiO<sub>3</sub> under UV (365 nm) irradiation for three repeated tests.



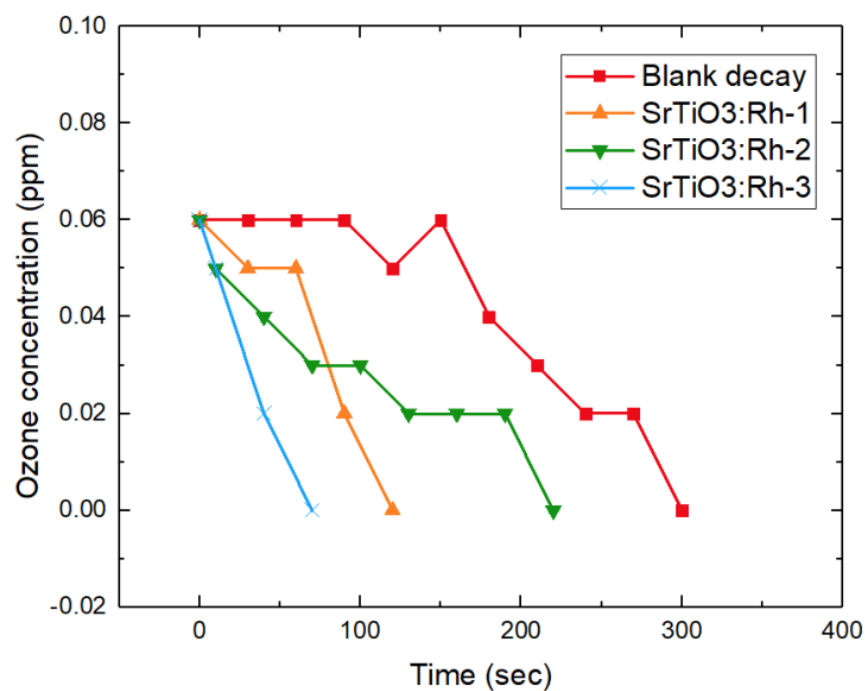
**Figure S5.** Photocatalytic decomposition of ozone in batch system by SrTiO<sub>3</sub>:Rh under UV (365 nm) irradiation for three repeated tests.



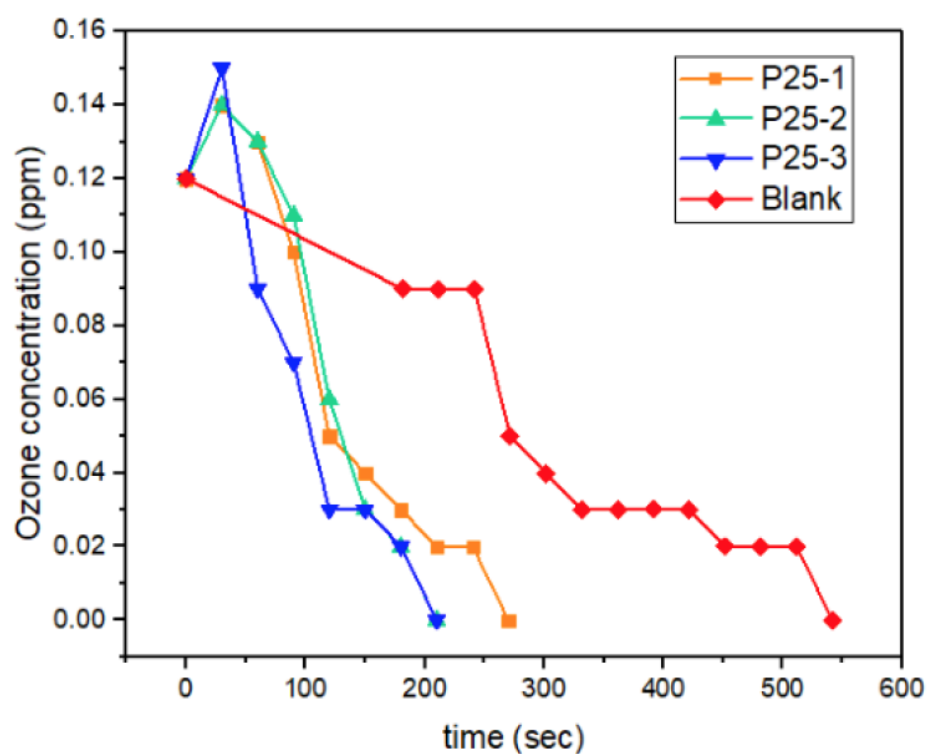
**Figure S6.** Photocatalytic decomposition of ozone in batch system by P25 under UV (365 nm) irradiation for three repeated tests.



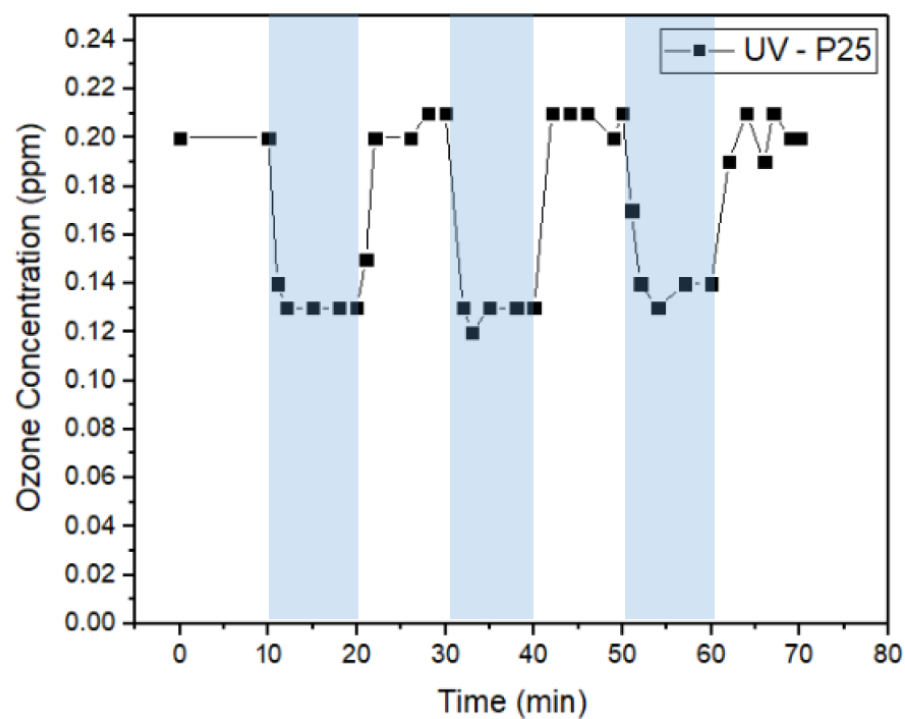
**Figure S7.** Photocatalytic decomposition of ozone in batch system by SrTiO<sub>3</sub> under Xe lamp (500W, broad band, with AM 1.5G filter) irradiation for three repeated tests.



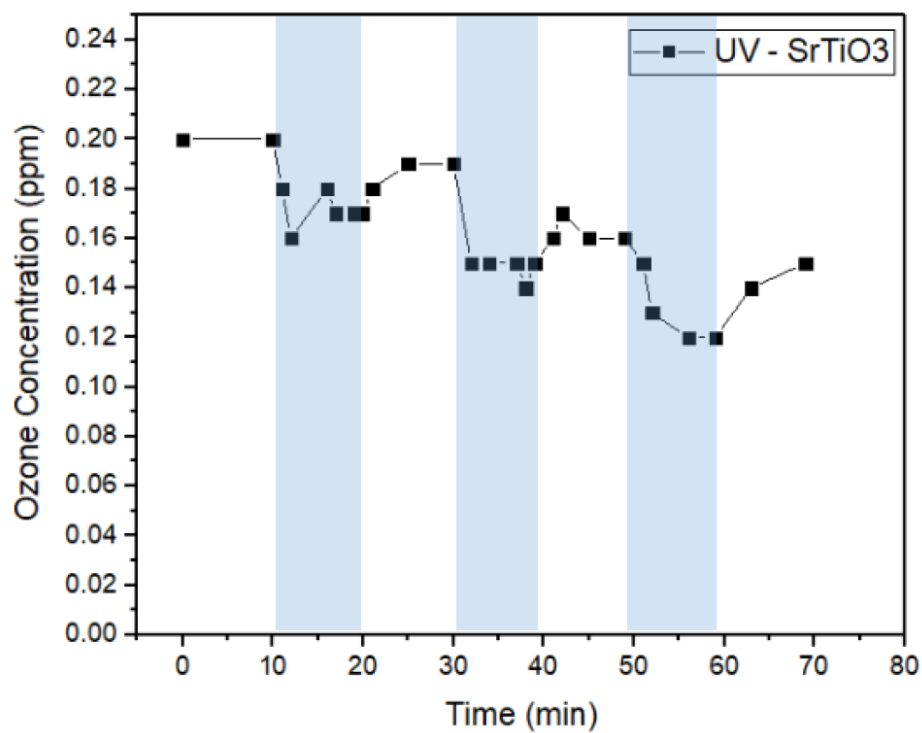
**Figure S8.** Photocatalytic decomposition of ozone in batch system by SrTiO<sub>3</sub>:Rh under Xe lamp (500W, broad band, with AM 1.5G filter) irradiation for three repeated tests.



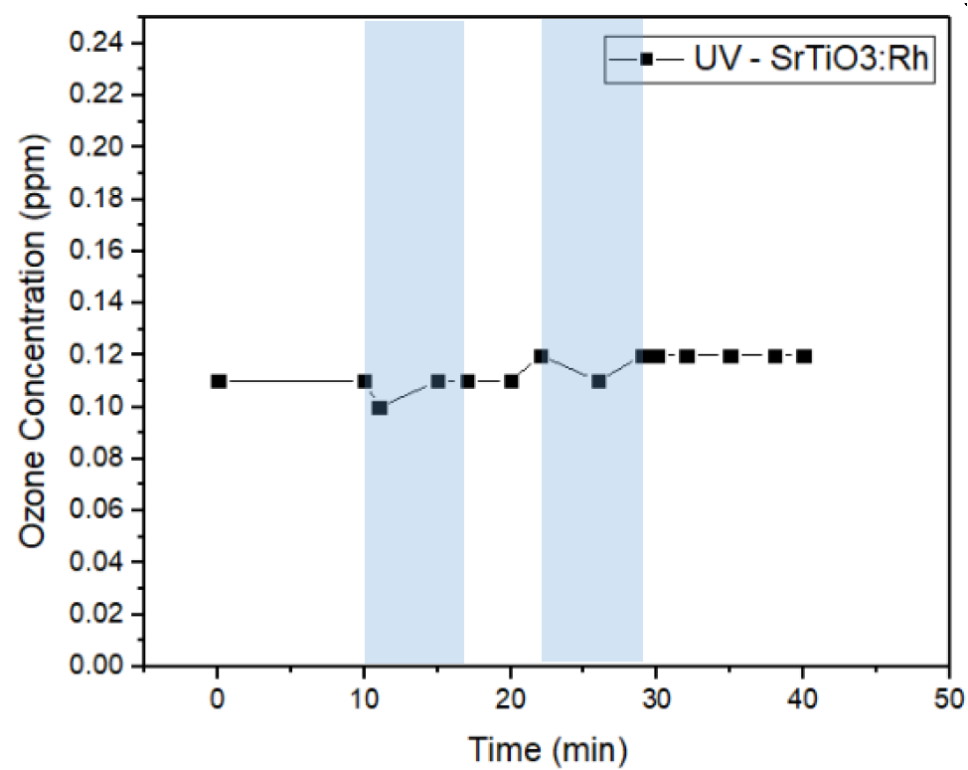
**Figure S9.** Photocatalytic decomposition of ozone in batch system by P25 under Xe lamp (500W, broad band, with AM 1.5G filter) irradiation for three repeated tests.



**Figure S10.** Photocatalytic decomposition of ozone in continuous flow system by P25 under UV lamp (365 nm).



**Figure S11.** Photocatalytic decomposition of ozone in continuous flow system by SrTiO<sub>3</sub> under UV lamp (365 nm).



**Figure S12.** Photocatalytic decomposition of ozone in continuous flow system by SrTiO<sub>3</sub>:Rh under UV lamp (365 nm).