

Supplementary Information

Fabrication of Porous and Visible Light Active ZnO Nanorods and ZnO@TiO₂ Core-Shell Photocatalysts for Self-Cleaning Applications

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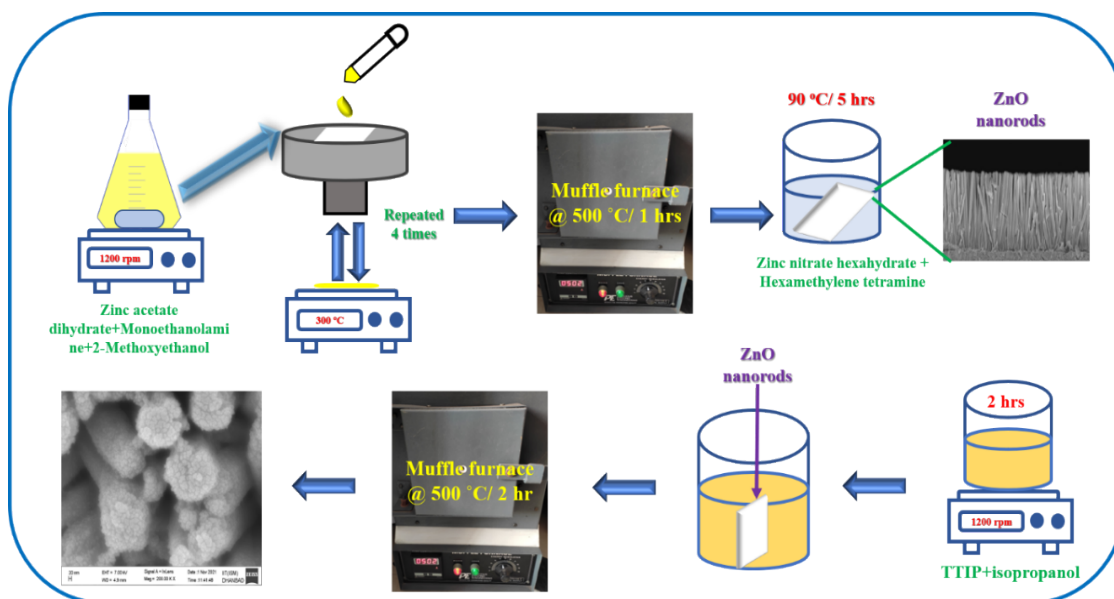


Fig. S1 Schematic representation of ZnO NRs and ZnO@TiO₂ core-shell.

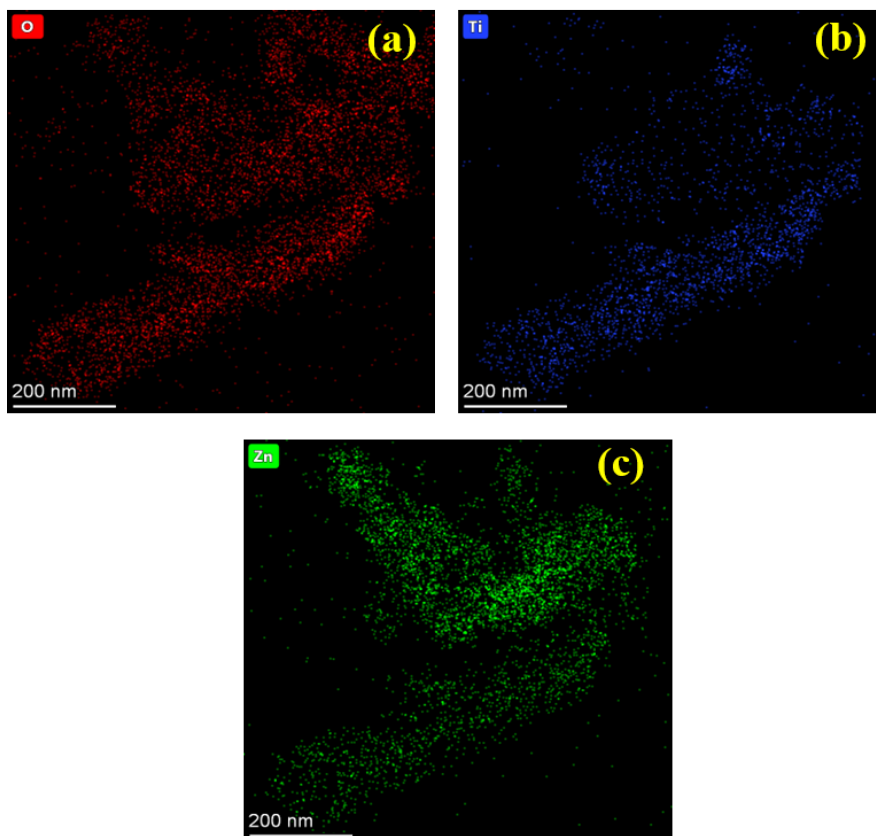


Fig. S2 HAADF-STEM and EDX elemental mapping images of O, Ti and Zn of the ZnO@TiO₂: 2 cycle core-shell

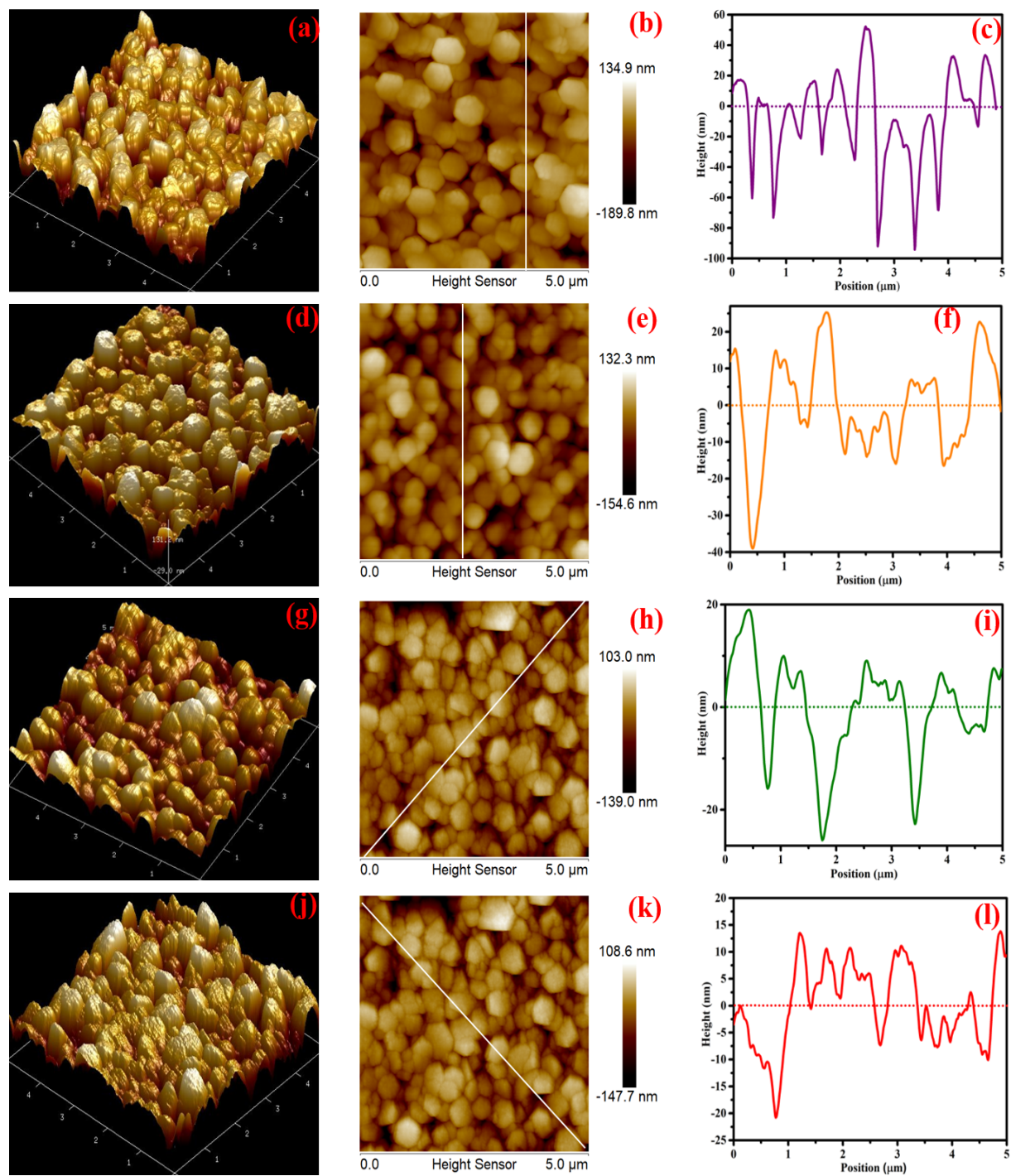


Fig. S3 2D, 3D and section profile AFM image of (a-c) ZnO NRs, (d-f) ZnO@TiO₂: 1 cycle, (g-i) ZnO@TiO₂: 2 cycle and (j-l) ZnO@TiO₂: 3 cycle.

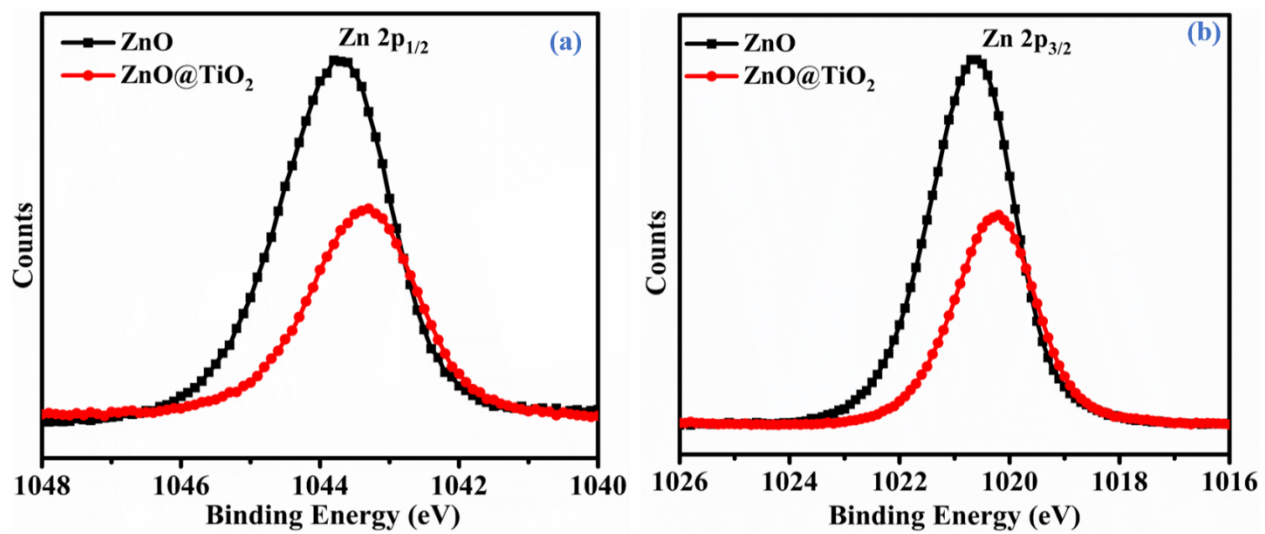


Fig. S4 Comparative peak shift of Zn (a) 2p_{1/2} and (b) 2p_{3/2} states of ZnO NRs and ZnO@TiO₂:2 cycle CS.

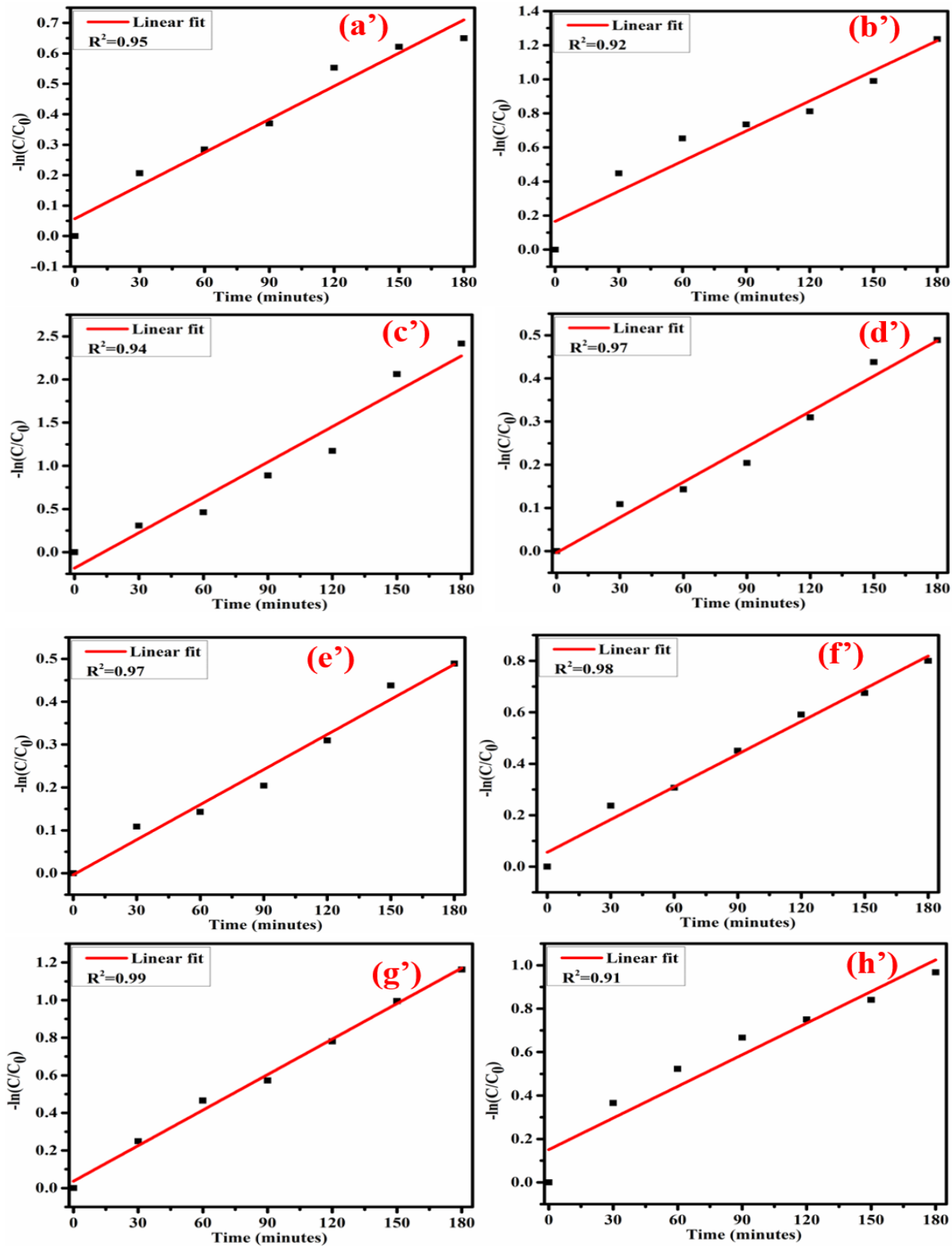


Fig. S5 a', b', c' d' is the respective kinetic study of a, b, c and d under UV light irradiation and e', f', g' h' is the respective kinetic study of e, f, g and h under sunlight irradiation.

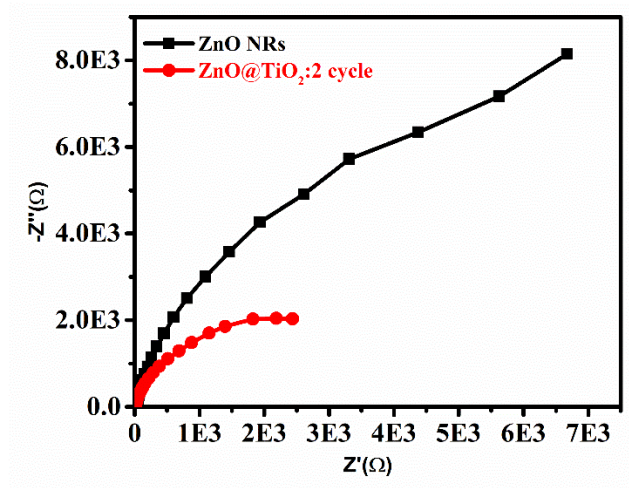


Fig. S6 Nyquist plot of the pristine ZnO NRs and ZnO@TiO₂: 2 cycle sample.