

## Supporting Information

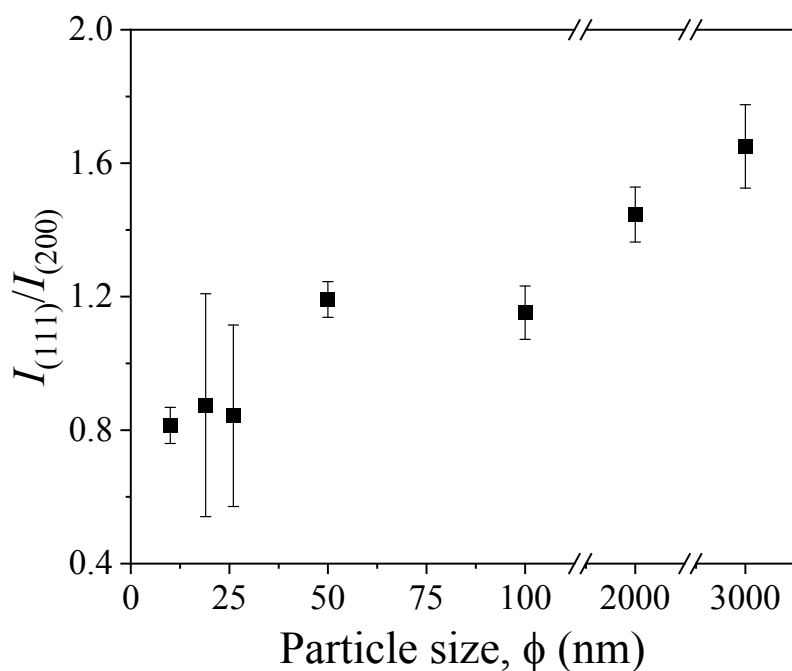
### Particle size effect on the photocatalytic kinetics of barium titanate powders

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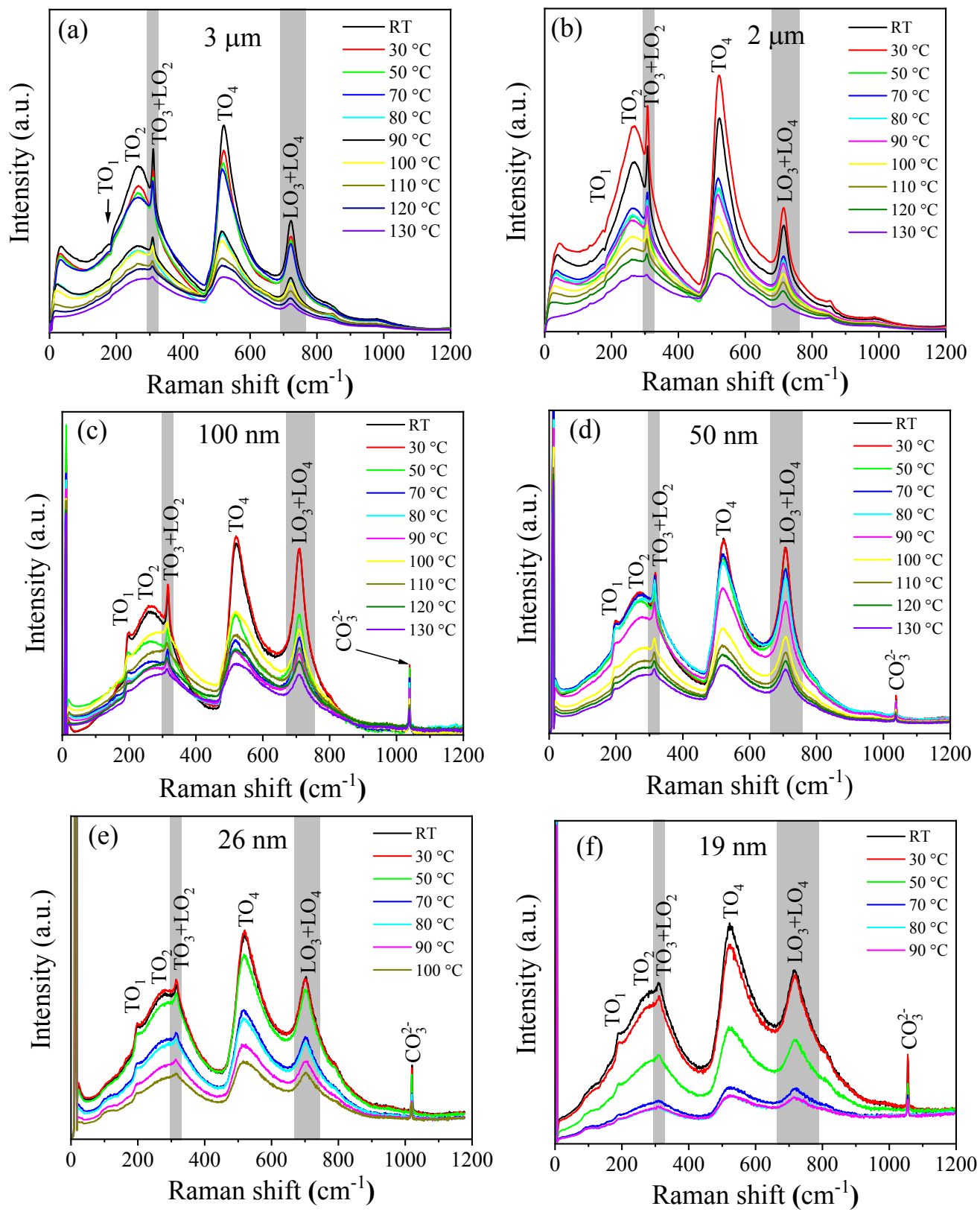
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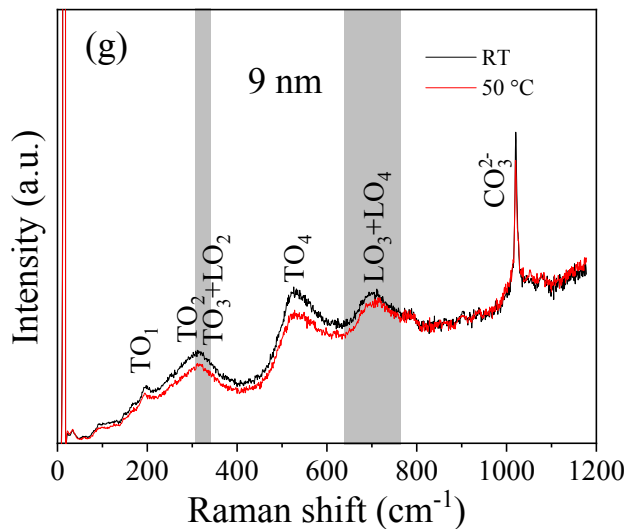
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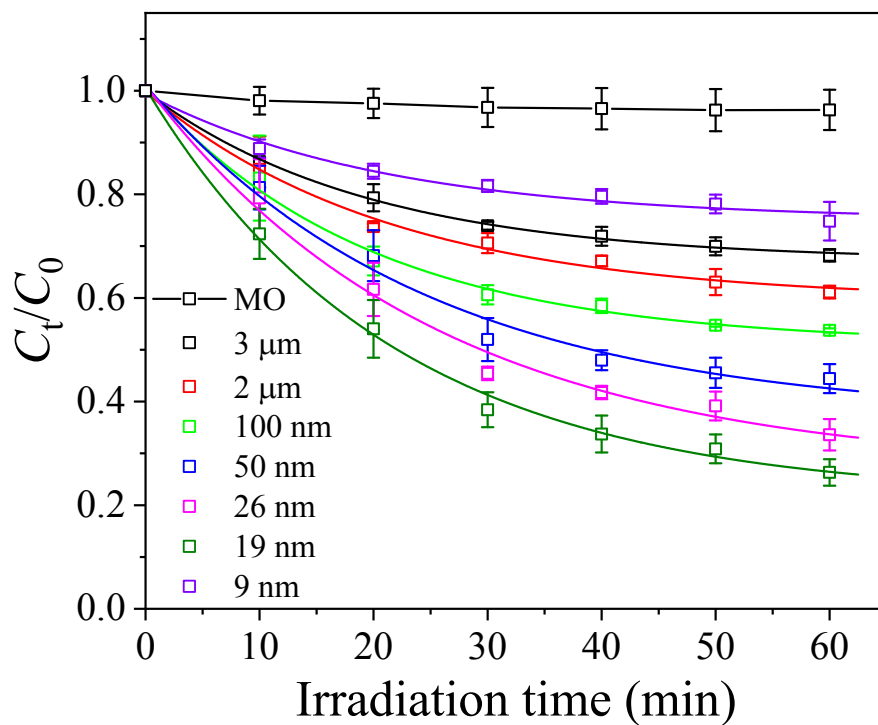


**Figure S1:** Estimation of tetragonality by the method proposed by Hayashi et al [1].





**Figure S2:** Temperature dependent Raman spectra of the powders.



**Figure S3:** Photochemical catalysis of methyl orange over barium titanate powders.

## References

[1] H. Hayashi, T. Nakamura, T. Ebina, In-situ Raman spectroscopy of BaTiO<sub>3</sub> particles for tetragonal–cubic transformation, *J. Phys. Chem. Solids*, 74 (2013) 957-962.