



Supporting Information

for

Sodium doping in brookite TiO₂ enhances its photocatalytic activity

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Beilstein J. Nanotechnol. **2022**, *13*, 599–609. [doi:10.3762/bjnano.13.52](https://doi.org/10.3762/bjnano.13.52)

Additional figures

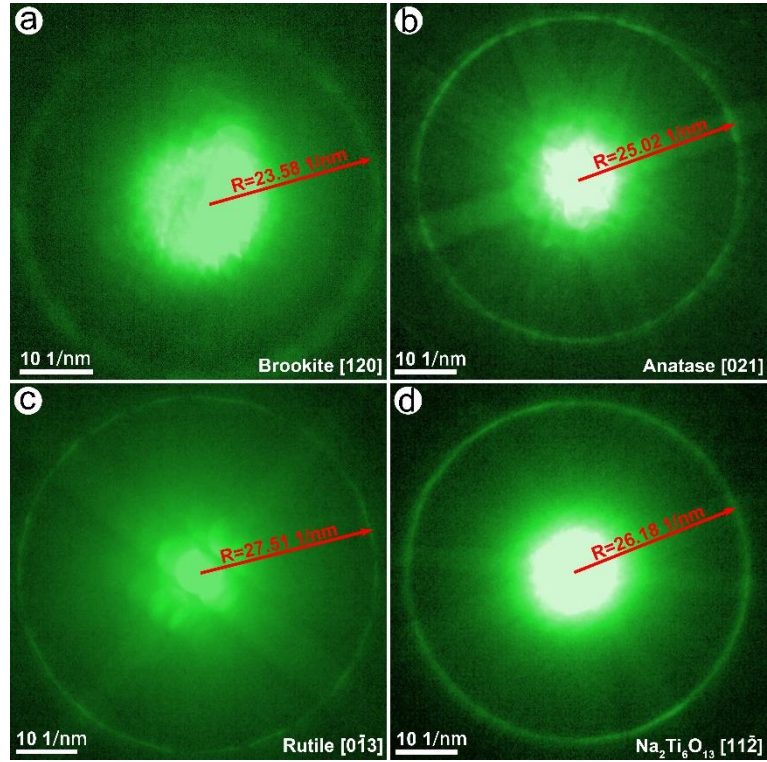


Figure S1: High-order Laue zone patterns of (a) brookite, (b) anatase, (c) rutile, and (d) $\text{Na}_2\text{Ti}_6\text{O}_{13}$, corresponding to the SAED patterns in Figure 4c₁–4c₄.

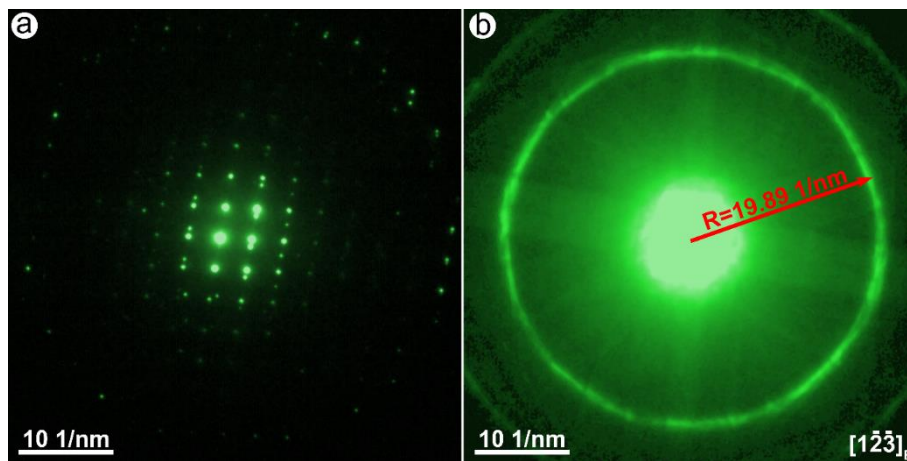


Figure S2: The SAED and high-order Laue zone patterns of the brookite crystallite calcinated at 800 °C, corresponding to the HRTEM image and the Fourier diffractogram in Figure 6c–6d.

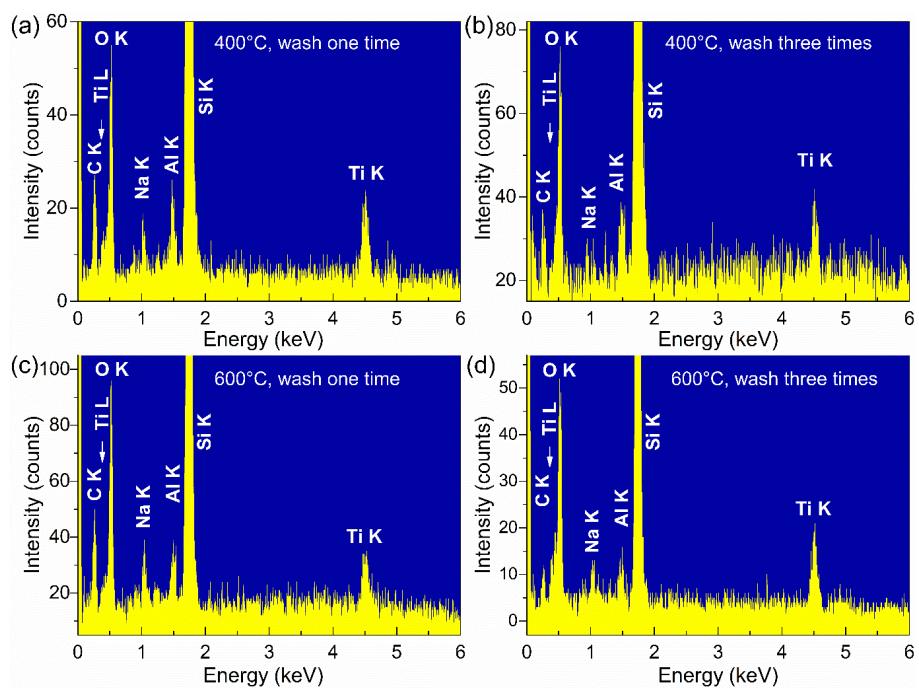


Figure S3: Comparison of the Na content of the as-obtained brookite when the hydrothermal reaction precipitates were centrifuged and washed (as described in the Experimental Section) one and three times, and then calcinated at 400 and 600 °C, respectively. It indicates that the Na content of the brookite clearly decreases after being washed three times.

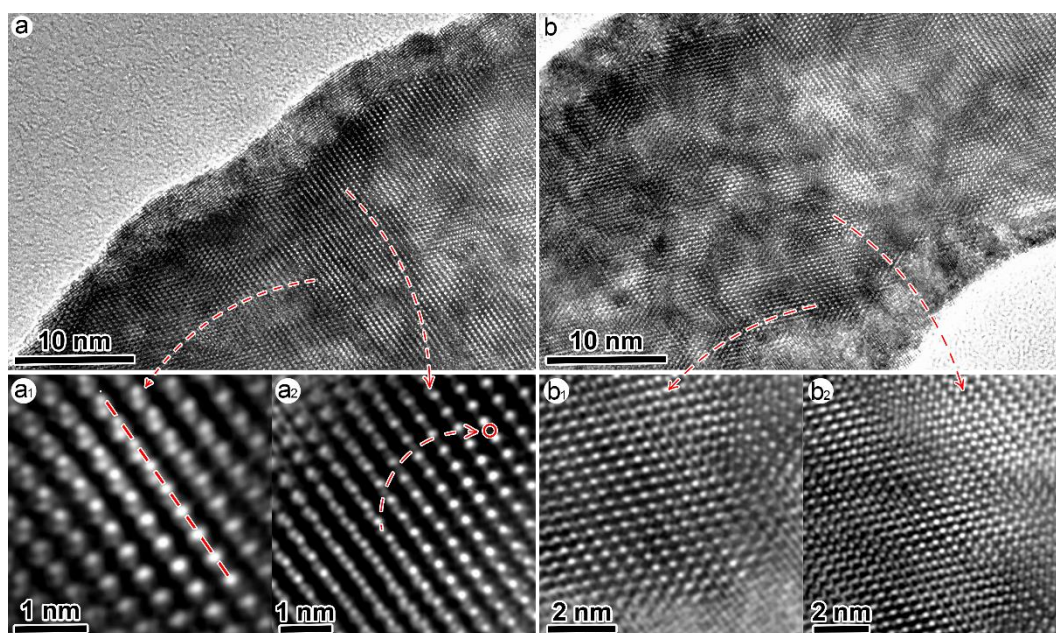


Figure S4: The HRTEM images of the brookite crystallite calcinated at 400 °C. There is a large number of (a₁) local lattice distortions, (a₂) interstitial atoms and atomic vacancies, and (b₁–b₂) complex defects.