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Photocatalytic Performance of Highly Active Brookite in the Degradation of Hazardous Organic Compounds Compared to Anatase and Rutile

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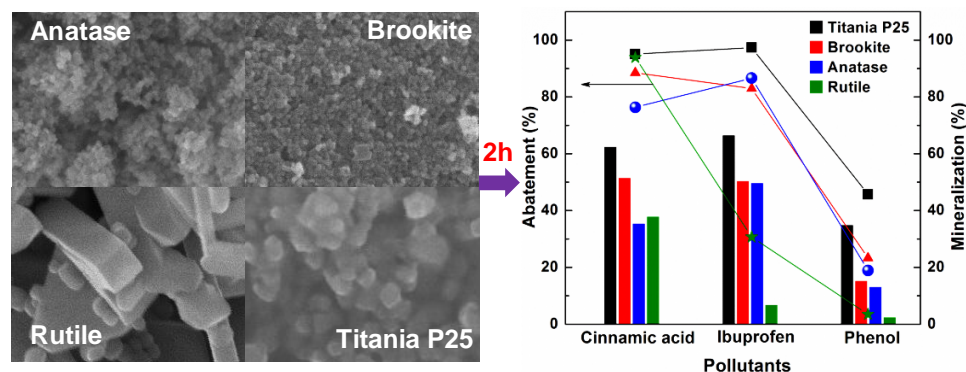
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Graphical abstract



Highlights

- Less known highly crystalline nano-sized brookite was hydrothermally synthesized.
- Brookite is superior photocatalytic active under sunlight and high pollutant loading.
- Photocatalytic performance of brookite is compared with that of anatase and rutile.
- Mineralization of cinnamic acid, ibuprofen and phenol is studied by TOC.
- Formation of ibuprofen intermediates is studied with ESI-TOF-MS.

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