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Influence of Tunable Pore Size on Photocatalytic and Photoelectrochemical Performances of Hierarchical Porous TiO_2/C Nanocomposites Synthesized via Dual-Templating

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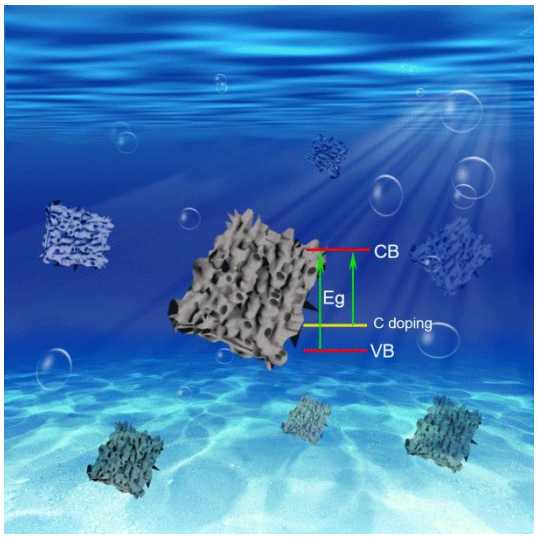

Highlights

- Unique "fish-bone" structure with macro-, meso- and micropores was synthesized by ice and silica hard templation.
- Using different size of silica colloid not only to tune the pore size of TiO_2/C but also prohibit the transformation of anatase to rutile.
- First time report to investigate the effect of pore size on the photocatalytic and