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Titania photonic crystal photocatalysts functionalized by graphene oxide nanocolloids

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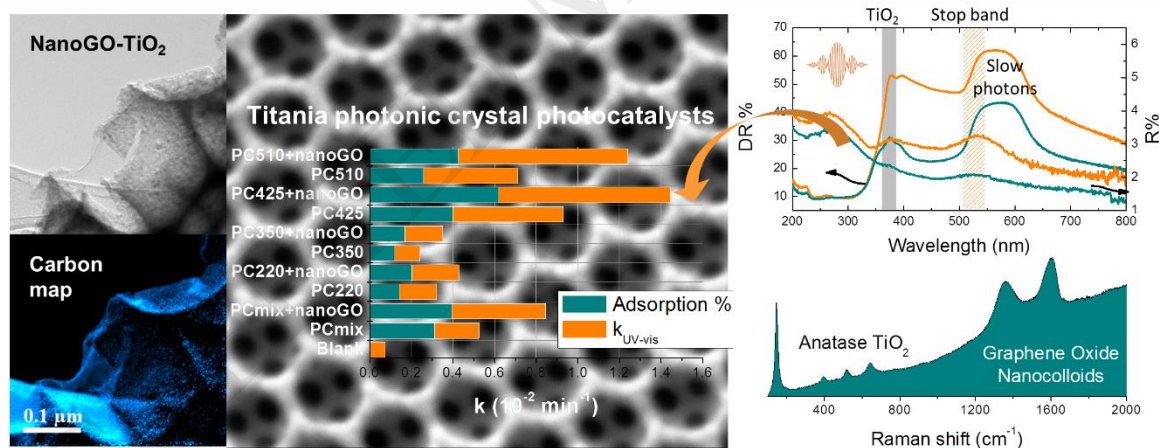
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Graphical abstract



Highlights

- Photonic band gap engineered TiO₂ inverse opals were fabricated by co-assembly.
- TiO₂ photonic films were surface functionalized by graphene oxide nanocolloids.
- NanoGO functionalization enhanced pollutant adsorption by the inverse opals.
- Slow photon amplified dye degradation was evinced for UV-Vis and visible light.
- Interfacial electron transfer improved further the photocatalytic efficiency.

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