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Surface-Grafted WO₃/TiO₂ Photocatalysts: Enhanced Visible-Light Activity towards Indoor Air Purification

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Highlights

- A new photocatalytic system for the efficient use of visible light has been developed.
- WO₃ act as e⁻ sink that would transfer excited e⁻ to the surface grafted nanoclusters.
- Surface grafted Fe(III) ions may significantly suppress the recombination of charges.
- Fe(III) ions are not substituting Ti atoms in a crystal but are grafted on the surface.
- All samples maintained their stability even after four experimental runs.

Graphical abstract

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