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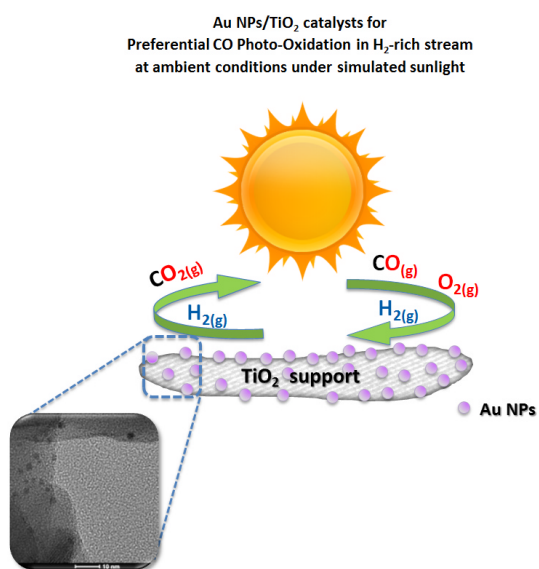
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Graphical abstract



Highlights

- Preferential CO photo-oxidation in H₂-rich stream under simulated sunlight at ambient conditions
- Photo-response of Au NPs (size 2-5 nm) on TiO₂ (anatase, rutile and combination thereof)
- The highest activity, both in dark and under solar light, for sample containing both anatase/rutile

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