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Low temperature prepared copper-iron mixed oxides for the selective CO oxidation in the presence of hydrogen

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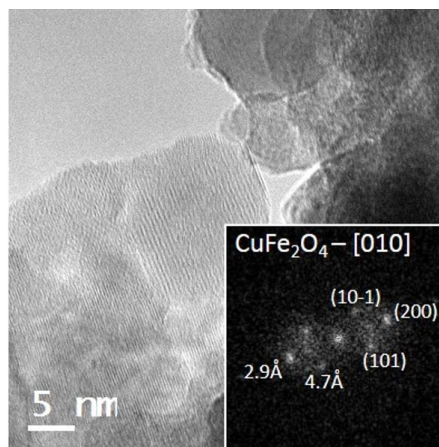
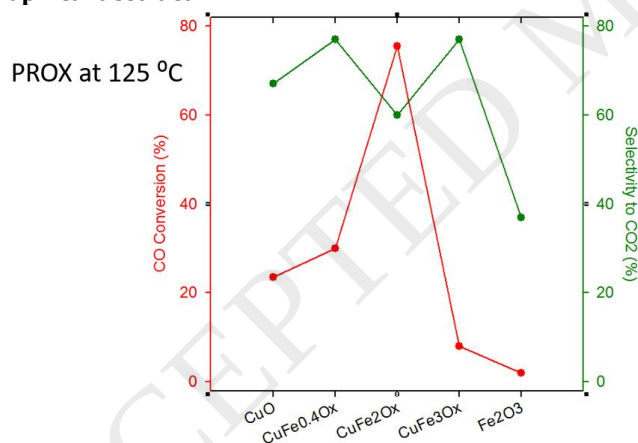
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Graphical abstract



Highlights

- Synthesis at low temperature of Cu-Fe mixed oxides with controlled composition
- Optimum specific surface area and lattice oxygen mobility for a 2 Fe/Cu molar ratio
- Cuprospinel CuFe₂O₄ formation was confirmed by fine structural characterization
- High conversion, selectivity to CO₂ and stability in catalytic CO-PROX reaction
- Fe enhances Cu resistance to full reduction during reaction delaying deactivation

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