

Highlights

- Fe, Co and Fe-Co thermal plasma-synthesized formulations as low-T FTS catalysts
- Optimization of the pretreatment protocol of said FTS catalytic formulations
- For Fe catalysts the simultaneous presence of oxides & carbides increases activity
- Catalysts exhibit nearly constant BET specific surface and no sintering over TOS
- H₂/CO uptake proved to be decreasing over temperature increase