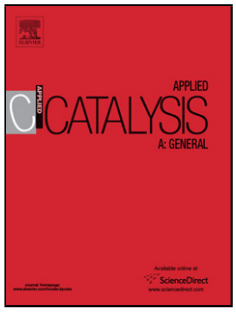

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Easily recoverable micron-sized silica-walled TS-1 colloidosomes: Preparation and application as liquid-phase alkene epoxidation catalysts

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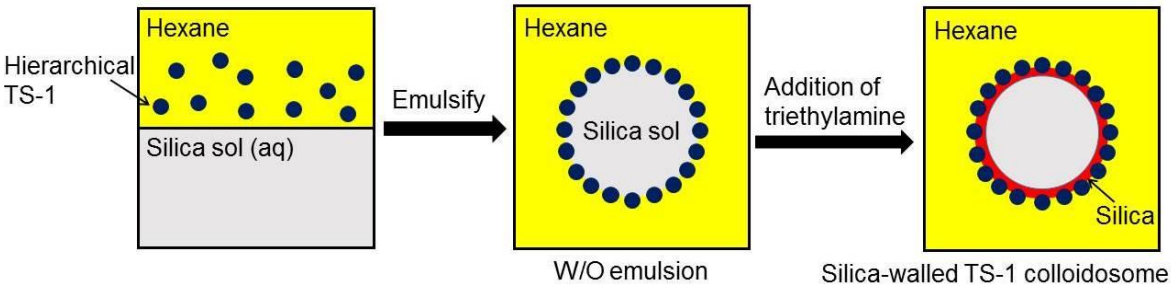
Graphical abstract



Micron-sized silica-walled TS-1 colloidosomes were fabricated via an interfacial sol-gel process.

Highlight

- Silica-walled TS-1 colloidosomes were fabricated through an interfacial sol-gel process.
- Micron-sized TS-1 colloidosome can be easily recycled by a filtration process.
- The prepared TS-1 colloidosome dimension is tailorable according to water-to-oil volume ratio ($R_{w/o}$) and ratio of TS-1 weight to oil volume ($R_{s/o}$).
- The prepared TS-1 colloidosome is catalytically active for liquid-phase alkene epoxidation.