

Nanocrystalline cellulose as reducing- and stabilizing agent in the synthesis of silver nanoparticles: Application as a surface-enhanced Raman scattering (SERS) substrate

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Highlights

- Synthesis of silver nanoparticles (AgNPs) from nanocrystalline cellulose.
- Nanocellulose used as both reducing- and stabilizing agent for AgNPs produce a sensitive SERS substrate.
- As-synthesized SERS substrate have high sensitivity for riboflavin with a detection limit of 3×10^{-7} M.
- Sensitive SERS substrate have great potential in environmental chemical pollution analysis.

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