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# Facile preparation of hollow-nanosphere based mesoporous g-C<sub>3</sub>N<sub>4</sub> for highly enhanced visible-light-driven photocatalytic hydrogen evolution

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## Abstract

Mesoporous g-C<sub>3</sub>N<sub>4</sub> consisting of hollow nanospheres (MCNHN) was prepared via a facile vapor-deposition method. It demonstrated an excellent visible-light photocatalytic H<sub>2</sub> evolution activity of 22.3 times greater than bulk g-C<sub>3</sub>N<sub>4</sub>. The special hollow nanosphere structure, increased specific surface area and modified crystalline enabled MCNHN to realize stronger light harvest and better photoinduced

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