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# Facile Synthesis of Magnetic Magnesium Silicate Hollow Nanotubes with High Capacity for Removal of Methylene Blue

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## ABSTRACT

This study reports the fabrication of hierarchical magnetic magnesium silicate hollow nanotubes. Owing to its unique structure and high surface area ( $539.36 \text{ m}^2 \text{ g}^{-1}$ ), the as-prepared hierarchical magnetic hollow nanotubes exhibit excellent adsorption performance on uptake of methylene blue (MB). Particularly, this strategy can be extended as a general method to prepare other magnetic metal silicate hollow nanotubes.

## 1. Introduction

Currently, dye pollution has been attracted increasing attention because it's toxic to aqueous flora, microorganisms and human beings[1-6]. Accordingly, it is necessary to find an efficient way to remove harmful dyes from wastewater. Among all the technologies, such as biological treatment, chemical oxidation, coagulation/flocculation etc, adsorption has been considered to be an effective process for dye removal because of their outstanding advantages, such as economy, low cost and easily operated

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