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An eco-friendly *N*-sulfonylation of amines using stable and reusable Zn–Al–hydrotalcite solid base catalyst under ultrasound irradiation

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ABSTRACT

Synthetic nanosized Zn–Al–hydrotalcite (Zn–Al–HT) with 20 nm crystallite size and 61 m²/g BET-surface area is found to be a mild and efficient catalyst for *N*-sulfonylation of amines in quantitative yields under ultrasound irradiation. Exclusive synthesis of sulfonamides, using Zn–Al–HT, under ultrasound irradiation, was realized by compatible basic sites of catalyst used. The products were isolated after simple work-up in high yields and purity.

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