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**Title:** Catalytic Friedel–Crafts acylation: magnetic nanopowder CuFe<sub>2</sub>O<sub>4</sub> as an efficient and magnetically separable catalyst

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CuFe<sub>2</sub>O<sub>4</sub>

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**Abstract:** Catalytic regioselective Friedel–Crafts acylation of an array of anisoles/arenes with various acid chlorides using 5–20 mol % of magnetic nanopowder CuFe<sub>2</sub>O<sub>4</sub> is reported. Unlike the conventional Friedel–Crafts reactions, which are catalyzed by moisture sensitive homogeneous catalysts/promoters, the nanopowder CuFe<sub>2</sub>O<sub>4</sub> catalyst is moisture insensitive and the product/ketone-catalyst isolation is easily achieved using the magnetic properties of CuFe<sub>2</sub>O<sub>4</sub>.

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