**Category**

**Polymer-Supported Synthesis**

**Key words**

**magnetic nanoparticles**

**cyclic 1,3-diones**

**activated acetonitriles**

**isatins**

**spirooxindoles**

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Copper Ferrite Nanoparticles: An Efficient and Reusable Nanocatalyst for a Green One-Pot, Three-Component Synthesis of Spirooxindoles in Water

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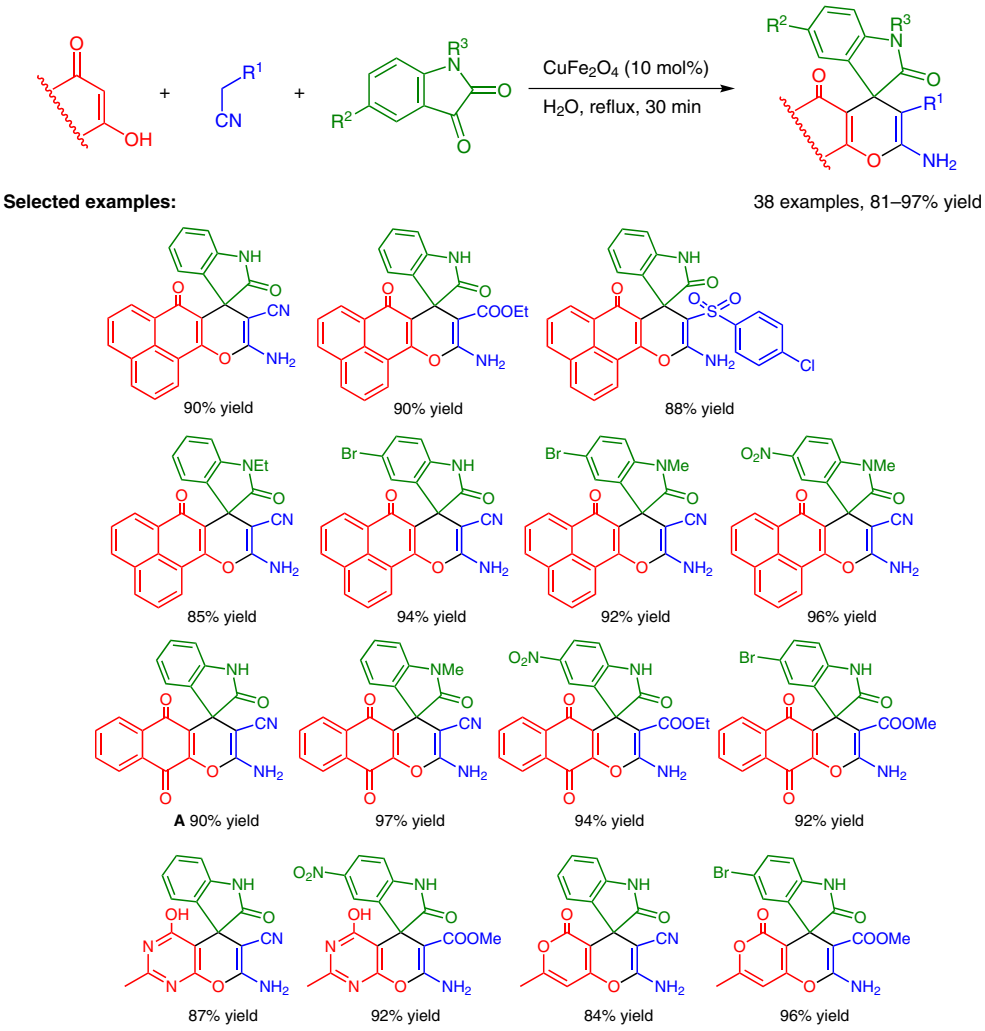
# Synthesis of Spirooxindoles Using $CuFe_2O_4$ Nanoparticles




**Significance:** $CuFe_2O_4$ nanoparticles catalyzed the three-component coupling of cyclohexane-1,3-diones, activated acetonitriles and isatins to give the corresponding spirooxindoles (38 examples, 81–97% yield).

**Comment:** In the synthesis of product **A**, the catalyst was recovered magnetically and reused four times (1st reuse: 90% yield, 2nd reuse: 89% yield, 3rd reuse: 88% yield, 4th reuse: 80% yield).

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