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# Core-Shell Nanostructured Heteropoly acid-functionalized Metal-Organic Frameworks: Bifunctional Heterogeneous Catalyst for Efficient Biodiesel Production

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## Graphical abstract

The core-shell structured heteropoly acid (HPA)-functionalized zeolitic imidazolate frameworks-8 (ZIF-8) nanoparticles were used as acidic and basic bifunctional, highly-porous, heterogeneous catalysts for efficient biodiesel production.

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