

## *Supporting Information*

# Fe<sub>3</sub>O<sub>4</sub> Magnetic Cores Coated with Metal–Organic Framework Shells as Collectable Composite Nanoparticle Vehicles for Sustained Release of the Pesticide Imidacloprid

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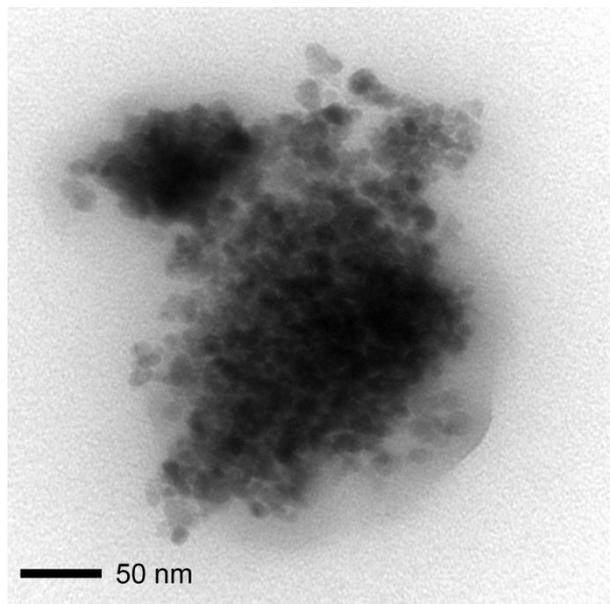
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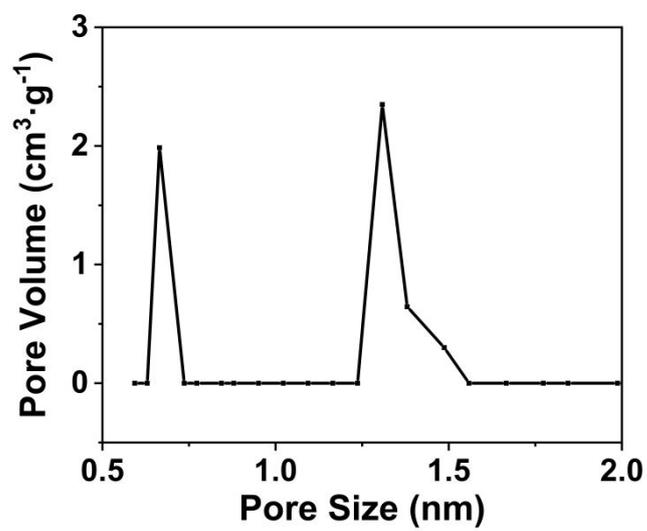
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**Figure S1.** TEM image of Fe<sub>3</sub>O<sub>4</sub>@PDA.



**Figure S2.** Pore size distribution of Fe<sub>3</sub>O<sub>4</sub>@PDA@UiO-66.

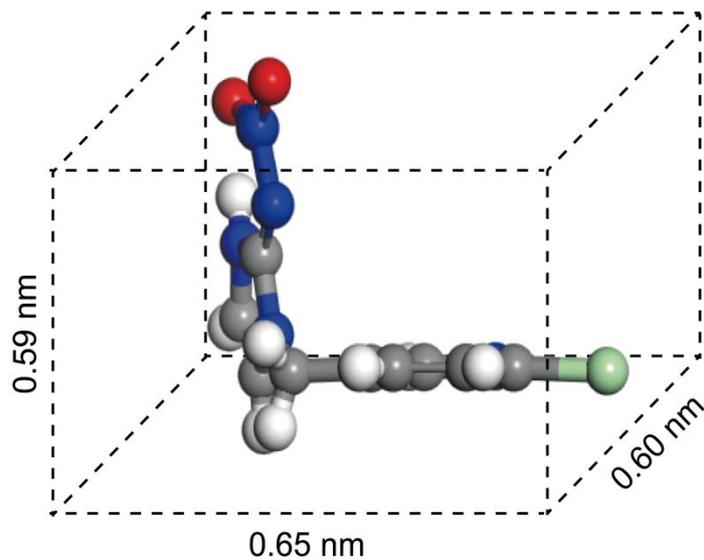


Figure S3. The molecular size of Imidacloprid.<sup>1</sup>

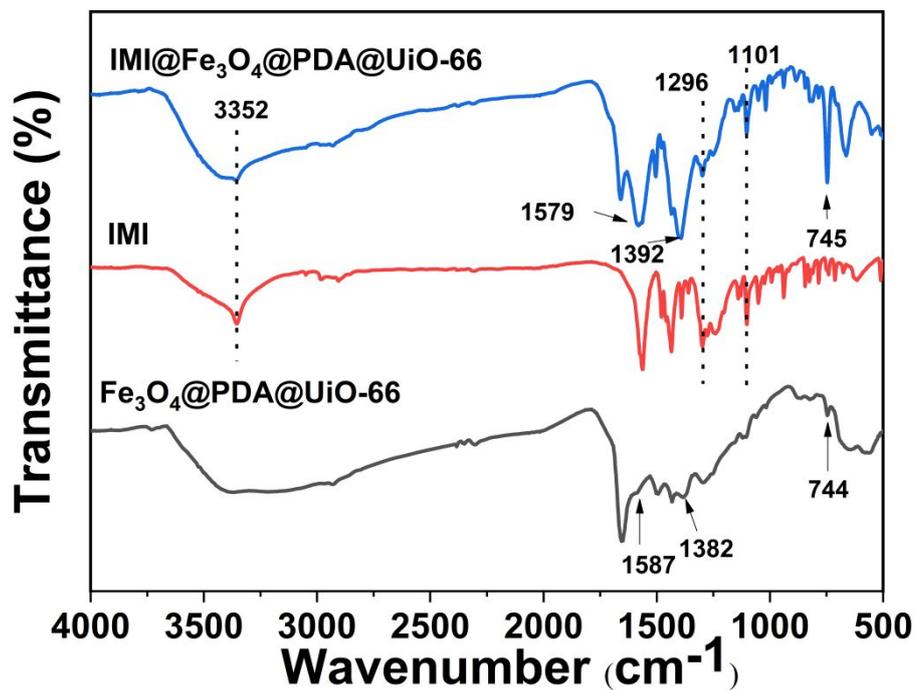


Figure S4. FT-IR spectra of  $\text{Fe}_3\text{O}_4@PDA@UiO-66$ , IMI, and IMI@

$\text{Fe}_3\text{O}_4@PDA@UiO-66$ , respectively.

Both two bands at  $3352\text{ cm}^{-1}$  and  $1296\text{ cm}^{-1}$  are assigned to the stretching mode of N–H and N–C of secondary amine of IMI, respectively.<sup>2</sup> Peak at  $1101\text{ cm}^{-1}$  was assigned to the aryl-Cl stretching mode in IMI.<sup>3</sup>

## References

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3. Quintás, G.; Armenta, S.; Garrigues, S.; Guardia, M. d. l., Fourier transform infrared determination of imidacloprid in pesticide formulations. *J. Brazil. Chem. Soc.* **2004**, *15*, 307-312.