

## Supporting Information

# Facile Synthesis Hyper-Crosslinked PdFe Bimetallic Polymer as Highly Active Catalyst for Ullmann Coupling Reaction of Chlorobenzene

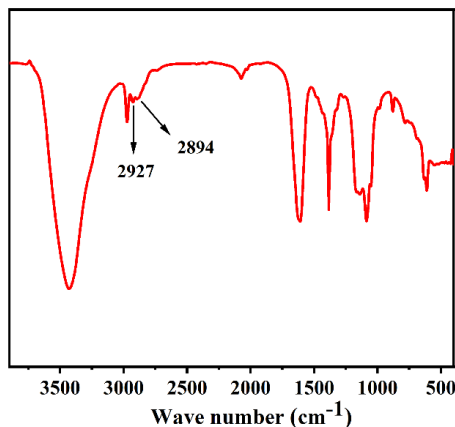
Cheng Tang <sup>1,2,†</sup>, Wenwen Yang <sup>1,†</sup>, Zhijuan Zou <sup>1,\*</sup>, Fang Liao <sup>1</sup>, Chunmei Zeng <sup>1</sup> and Kunpeng Song <sup>1,\*</sup>

<sup>1</sup> Chemical Synthesis and Pollution Control Key Laboratory of Sichuan Province,  
College of Chemistry and Chemical Engineering, China West Normal University, Shida Road,  
Nanchong 637009, China; 20200043@sasu.edu.cn (C.T.);  
wenwenyang85@163.com (W.Y.); liaofang407@163.com (F.L.);  
meizeng@163.com (C.Z.)

<sup>2</sup> Key Laboratory of Low-cost Rural Environmental Treatment Technology,  
Sichuan University of Arts and Science, Education Department of Sichuan Province, Dazhou 635000, China

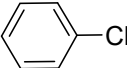
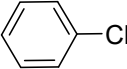
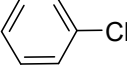
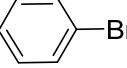
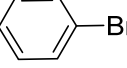
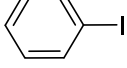
\* Correspondence: zouzhijuan121@163.com (Z.Z.); song19880405@126.com (K.S.)

† The authors contributed equally to this paper.



**Figure S1.** The FT-IR spectrum of catalyst HCP@Pd/Fe.

**Table S1** HCP@Pd/Fe catalyzed Ullmann coupling reaction of different aryl halides.

Entry	Substrate1	Base	Solvent (2ml)	T(°C)	Yield (%)
1		K <sub>3</sub> PO <sub>4</sub> ·3H <sub>2</sub> O	CH <sub>3</sub> OH: H <sub>2</sub> O=1:1	80	91
2		K <sub>3</sub> PO <sub>4</sub> ·3H <sub>2</sub> O	CH <sub>3</sub> OH: H <sub>2</sub> O=1:1	90	97.7
3		K <sub>3</sub> PO <sub>4</sub> ·3H <sub>2</sub> O	CH <sub>3</sub> OH: H <sub>2</sub> O=1:1	100	100
4		K <sub>3</sub> PO <sub>4</sub> ·3H <sub>2</sub> O	CH <sub>3</sub> OH: H <sub>2</sub> O=1:1	100	99.1
5		K <sub>3</sub> PO <sub>4</sub> ·3H <sub>2</sub> O	CH <sub>3</sub> OH: H <sub>2</sub> O=1:1	80	96.3
6		K <sub>3</sub> PO <sub>4</sub> ·3H <sub>2</sub> O	CH <sub>3</sub> OH: H <sub>2</sub> O=1:1	80	60

Reaction conditions: aryl halide (1 mmol), K<sub>3</sub>PO<sub>4</sub>·3H<sub>2</sub>O (1.5 mmol), V<sub>MeOH</sub>/V<sub>H<sub>2</sub>O</sub>=1:1 (2 ml), catalyst (20 mg), reaction time 180 min.