## Supporting Electronic Information (SEI):

## Facile Synthesis, Characterization and Application of Highly Active Palladium Nano-network Structures Supported on Electrospun Carbon Nanofibers

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## **Characterization of the Products**

1. Biphenyl, CAS: 92-52-4



<sup>1</sup>H NMR (CDCl<sub>3</sub>, 400 MHz, ppm): δ 7.35 (*t*, 2H,J=7.2), 7.45 (*t*, 4H, J = 7.6 Hz), 7.59 (*d*, 4H, J = 8.0 Hz). <sup>13</sup>C {1H} NMR (CDCl<sub>3</sub>, 100 MHz, ppm): 127.19(C), 127.27(C), 128.77 (C), 141.25 (C).



Figure S1. <sup>1</sup>H NMR of Biphenyl in CDCl<sub>3</sub> solution.



Figure S2. <sup>13</sup>C NMR of Biphenyl in CDCl<sub>3</sub> solution

2. 4-Nitrobiphenyl, CAS: 92-93-3

<sup>1</sup>H NMR (CDCl<sub>3</sub>, 400 MHz, ppm): δ 7.49(*m*, 3H, J=7.2), 7.62(*d*, 2H, J=8.0), 7.74(*d*, 2H, J=8.0), 8.30(*d*, 2H, J=8.0). <sup>13</sup>C {1H} NMR (CDCl<sub>3</sub>, 100 MHz, ppm): 124.41(C), 127.39(C), 127.80 (C), 128.92(C), 138.79 (C), 147.12 (C), 147.64 (C).



Figure S3. <sup>1</sup>H NMR of 4-Nitrobiphenyl in CDCl<sub>3</sub> solution.



Figure S4. <sup>13</sup>C NMR of 4-Nitrobiphenyl in CDCl<sub>3</sub> solution.

3. 4-Methoxybiphenyl, CAS: 613-37-6



<sup>1</sup>H NMR (CDCl<sub>3</sub>, 400 MHz, ppm): δ 3.86 (s, 3H), 6.97(*d*, 2H, J=8.4), 7.30(*d*, 1H, J=7.6), 7.42(*t*, 2H, J=7.6), 7.54(*t*, 4H, J=8.4). <sup>13</sup>C {1H} NMR (CDCl<sub>3</sub>, 100 MHz, ppm): 55.37(C),127.39(C), 114.20 (C), 126.67 (C), 126.75 (C), 128.17 (C), 128.73 (C), 133.78 (C), 140.83 (C), 159.13 (C).



Figure S5. <sup>1</sup>H NMR of 4-Methoxybiphenyl in CDCl<sub>3</sub> solution



Figure S6. <sup>13</sup>C NMR of 4-Methoxybiphenyl in CDCl<sub>3</sub> solution