

Electronic Supplementary Information

Supported Platinum Nanoparticles onto the Polymeric Ionic Liquid Functionalized Magnetic Silica: As an Effective and Reusable Heterogeneous Catalyst for Selective Oxidation of Alcohols in Water

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1-Octanal: colorless liquid; ¹H NMR (CDCl₃, 300 MHz) δ (ppm) 0.88 (m, 3H), 1.24-1.30 (m, 9H), 1.62 (m, 2H), 2.41(m, 2H), 9.756 (t, J = 1.8 Hz, 1H).

-Nitrobenzaldehyde: yellow solid; ¹H NMR (CDCl₃, 300 MHz) δ (ppm) 7.84-8.07 (Ar H), 10.08 (s, 1H).

4-Methylbenzoic acid: white solid; ¹H NMR (CDCl₃, 400 MHz) δ (ppm) 8.03 (d, J = 8.0 Hz, 2H), 7.30 (d, J = 7.6 Hz, 2H), 2.46 (s, 3H).

Benzo[d][1,3]dioxole-5-carboxylic acid: white solid; ¹H NMR (DMSO-d₆, 400 MHz) δ (ppm) 12.77 (brs, 1H), 7.54 (d, J = 6.4 Hz, 1H), 7.35 (s, 1H), 6.99 (d, J = 6.4 Hz, 1H), 6.12 (s, 2H).

Acetophenone: colorless liquid; ¹H NMR (CDCl₃, 400 MHz) δ (ppm) 7.92 (d, J = 7.2 Hz, 2H), 7.52 (t, J = 7.2 Hz, 1H), 7.41 (t, J = 8.0 Hz, 2H), 2.56 (s, 3H).

Cyclohexanone: colorless liquid; ¹H NMR (CDCl₃, 400 MHz) δ (ppm) 2.29 (t, J = 6.4 Hz, 4H), 1.79-1.85 (m, 4H), 1.66-1.70 (m, 2H).











