Electronic Supplementary Information (ESI)

Cinnamyl alcohol oxidation using supported bimetallic Au-Pd nanoparticles: an investigation of autoxidation and catalysis

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ESI Figure 1 Oxidation of cinnamyl alcohol under different oxygen pressure carried out in the presence and absence of the catalyst as a function of reaction time. Reaction conditions: 1%AuPd/TiO_2(Imp), 10 mg; oxygen pressure, 1-3 bar; temperature, 120 °C; 0.5 M cinnamyl alcohol in toluene. Full figures- reactions carried out in the absence of a catalyst: 1 bar (■); 2 bar (♦), 3 bar (▲); empty figure- reactions carried out in the presence of a catalyst: 1 bar (□); 2 bar (◇); 3 bar (◆)
ESI Figure 2 Oxidation of cinnamyl alcohol under different oxygen pressure carried out in the presence and absence of the catalyst. Selectivity to cinnamaldehyde and benzaldehyde as a function of oxygen pressure. Reaction conditions: time, 4 hours; 1%AuPd/TiO$_2$ (Imp), 10 mg; oxygen pressure, 1-3 bar; temperature, 120 °C; 0.5 M cinnamyl alcohol in toluene. Full figures- reactions carried out in the absence of the catalyst: CinnALD (■); BenzALD (●); BenzACID (▲); empty figure- reactions carried out in the presence of the catalyst: CinnALD (□), BenzALD (○); BenzACID (△)