

SUPPLEMENTARY MATERIALS

Electrochemical Synthesis of Zirconium Pre-Catalysts for Homogeneous Ethylene Oligomerization

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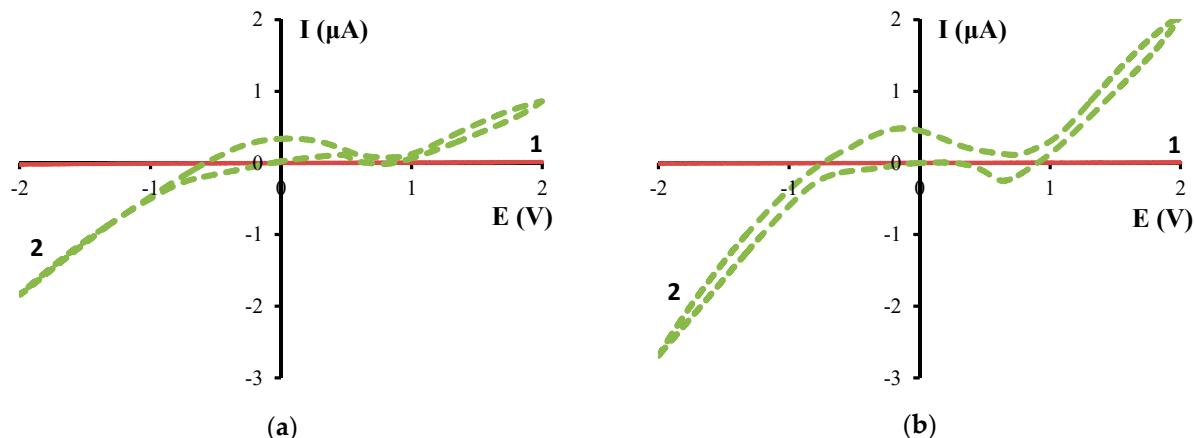


Figure S1. Cyclic voltammograms, recorded on Zr-working electrode in acetonitrile solution of: (a) octanoic acid (1), octanoic acid + Et₄NCl (2); (b) lauric acid (1), lauric acid + Et₄NCl (2) (concentrations of acetic acid, lauric acid and supporting salt are 0.63 mol·L⁻¹, 0.05 mol·L⁻¹ and 0.01 mol·L⁻¹ respectively)

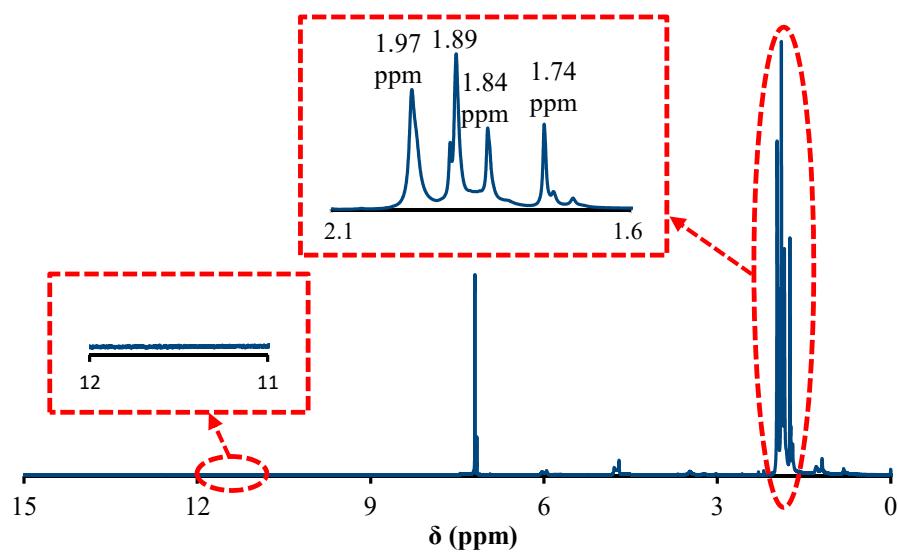


Figure S2. ¹H NMR spectrum of $[Zr(Ac)_x]$

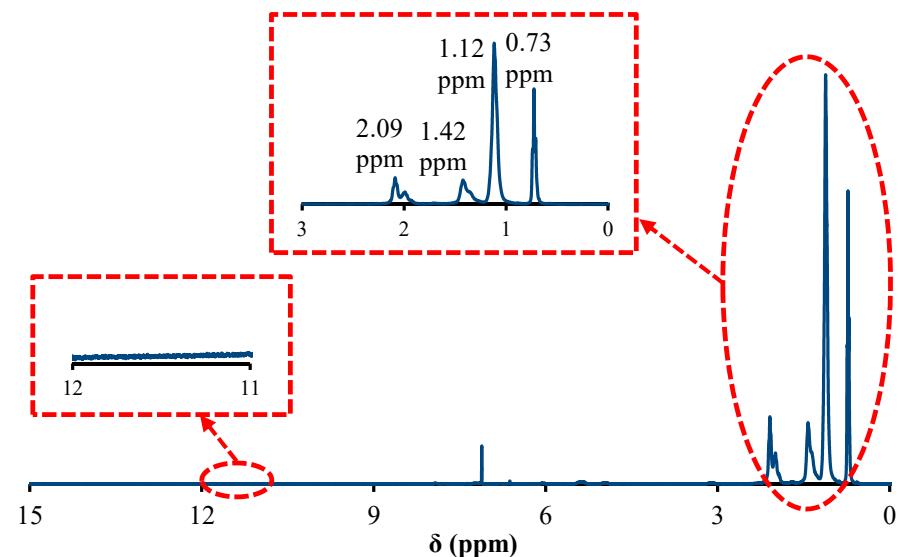


Figure S3. ¹H NMR spectrum of $[Zr(Oct)_x]$

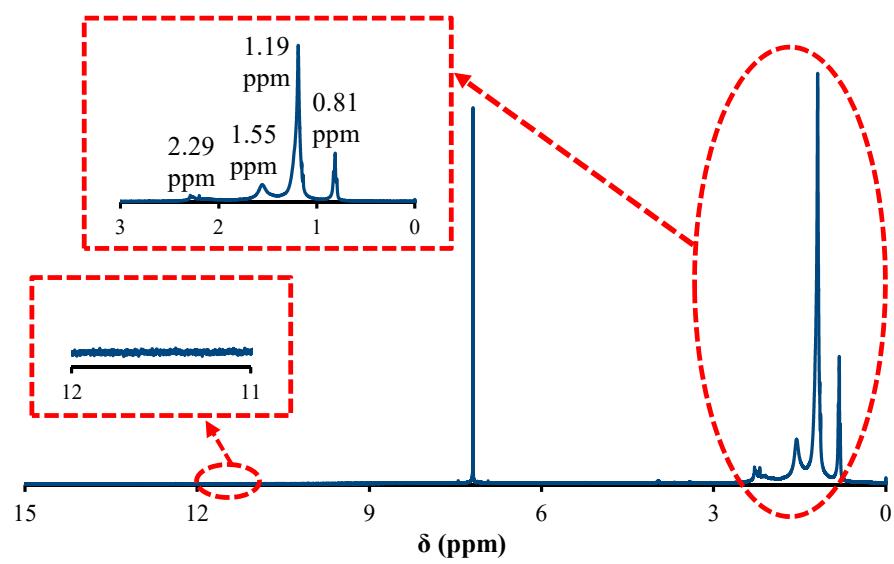


Figure S4. ^1H NMR spectrum of $[\text{Zr}(\text{Laur})_x]$

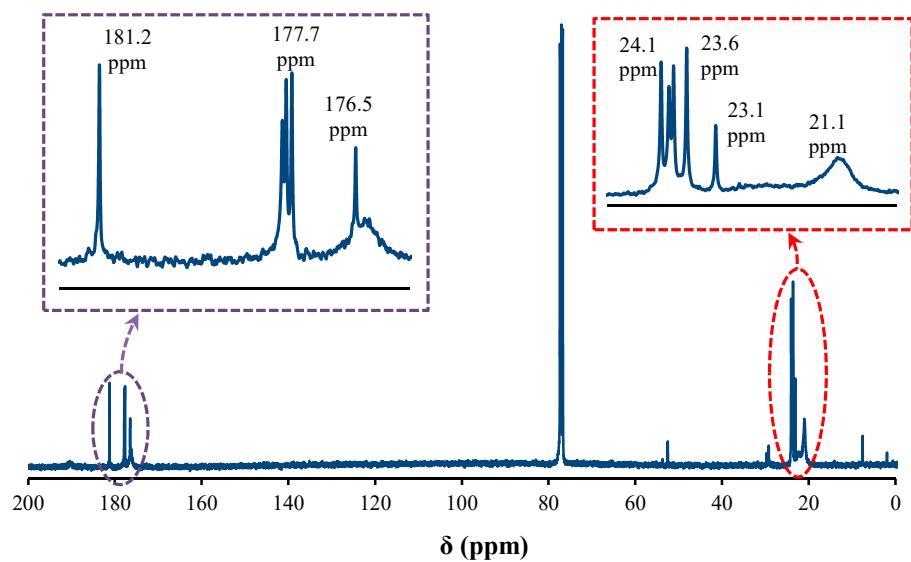


Figure S5. $^{13}\text{C}\{^1\text{H}\}$ NMR spectrum of $[\text{Zr}(\text{Ac})_x]$

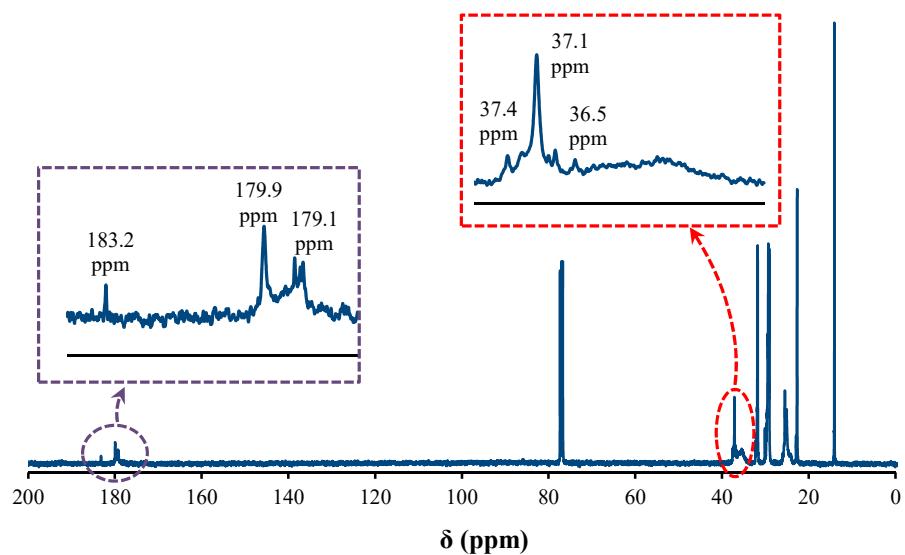


Figure S6. $^{13}\text{C}\{\text{H}\}$ NMR spectrum of $[\text{Zr}(\text{Oct})_x]$

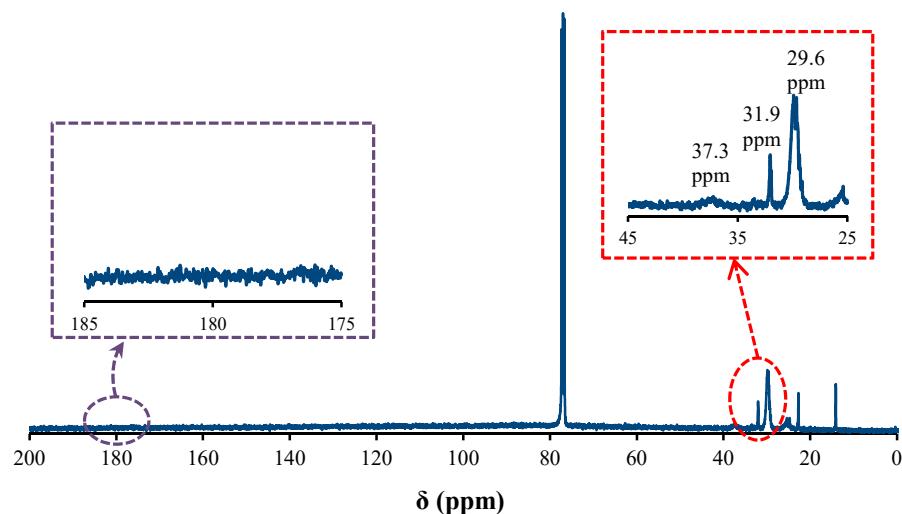


Figure S7. $^{13}\text{C}\{\text{H}\}$ NMR spectrum of $[\text{Zr}(\text{Laur})_x]$

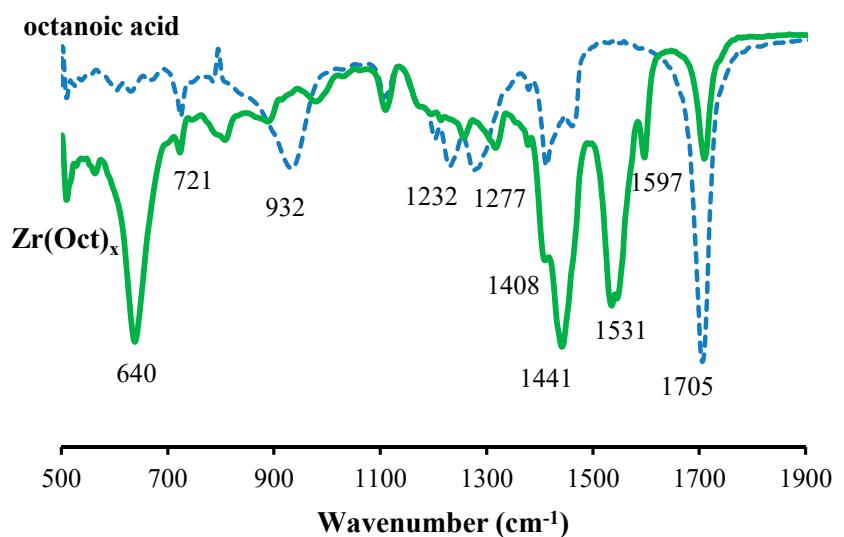


Figure S8. IR-spectra of octanoic acid and $[Zr(Oct)]_x$

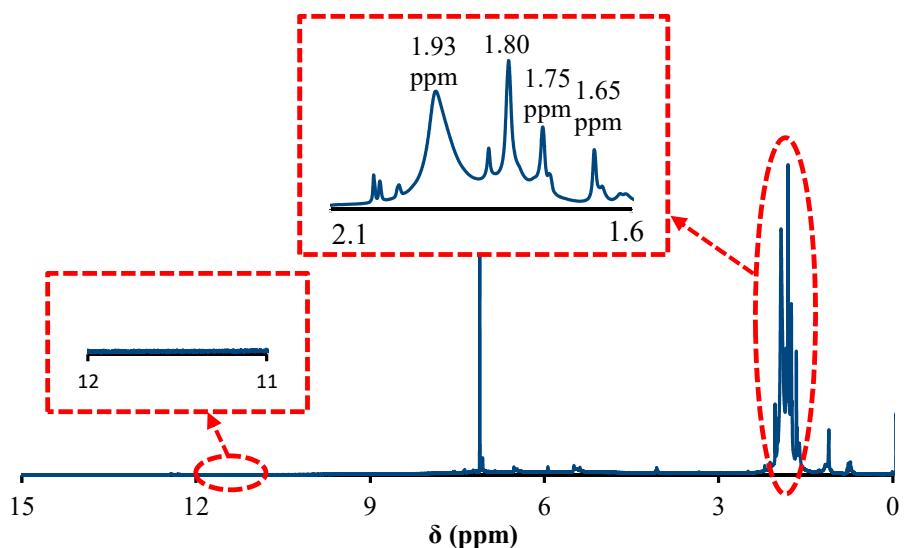


Figure S9. ^1H NMR spectrum of chemically synthesized zirconium acetate

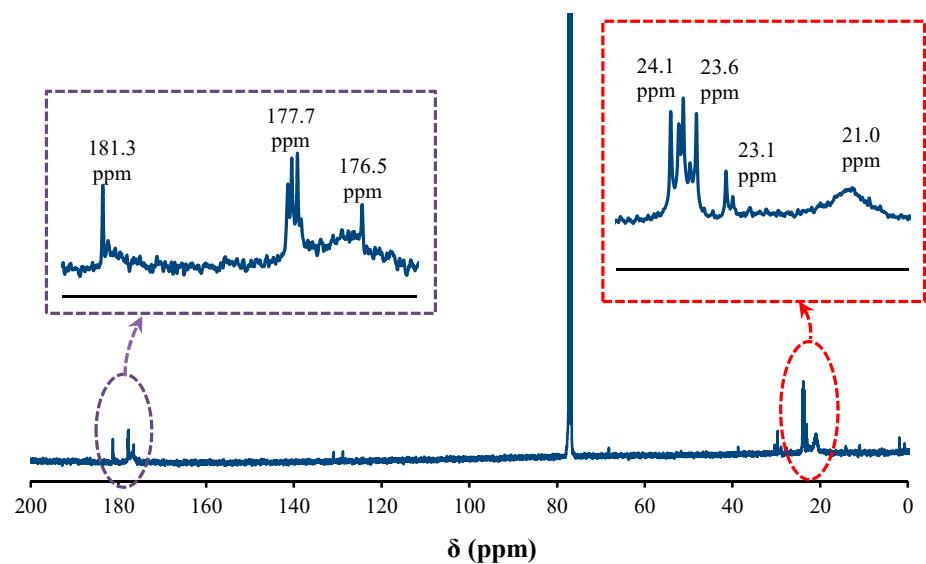


Figure S10. $^{13}\text{C}\{^1\text{H}\}$ NMR spectrum of chemically synthesized zirconium acetate