

Supplementary material

How the acido-basic properties of Mg-silicates and clays govern the catalytic mechanism of transesterification reactions

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Kinetic data for Magnesol

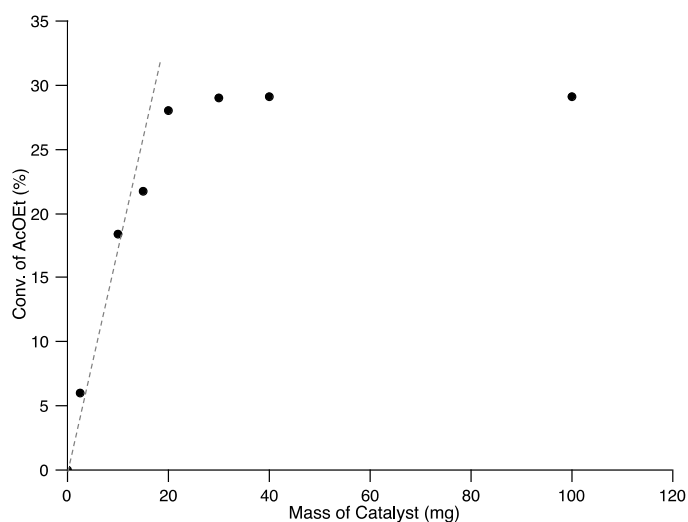


Figure S1. Conversion of ethyl acetate (AcOEt) as a function of mass of Magnesol
(*Reaction conditions: temp = 60 °C; $n(\text{MeOH})/n(\text{ester}) = 24.3$; reaction time = 5 h*)

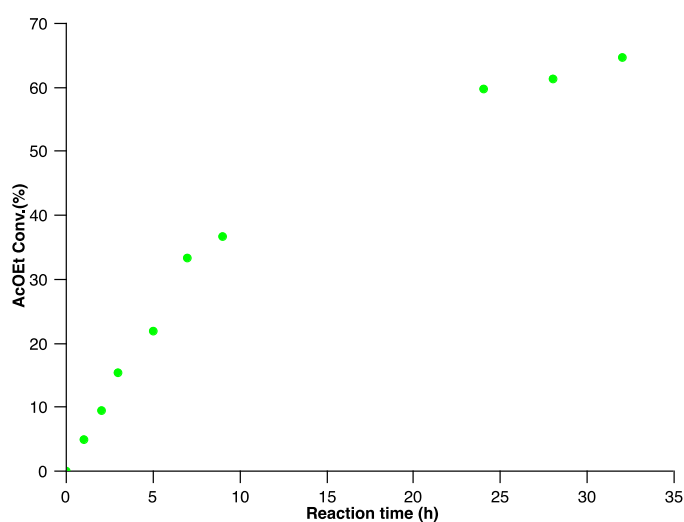


Figure S2. Conversion of AcOEt as a function of reaction time on Magnesol
(*Reaction conditions: temp = 60 °C; $n(\text{MeOH})/n(\text{ester}) = 24.3$; catalyst mass = 18 mg*)

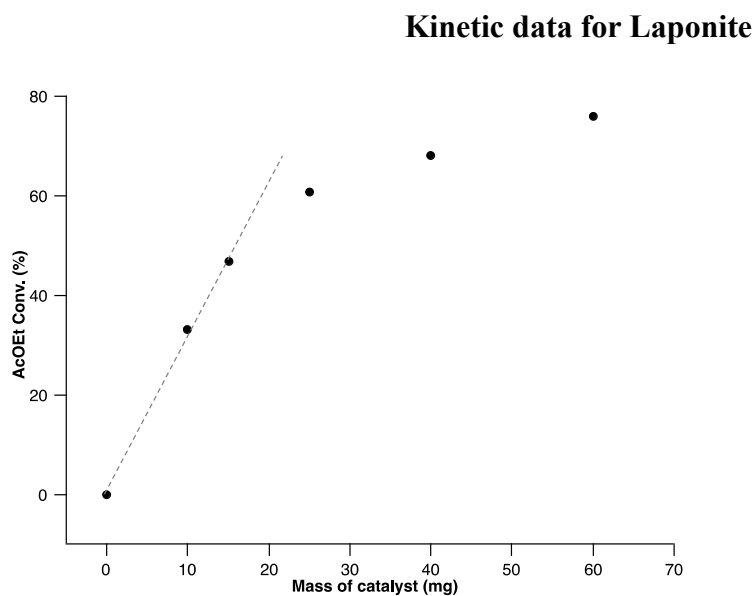


Figure S3. Conversion of AcOEt as a function of mass of Laponite
(*Reaction conditions: temp = 60 °C; $n(\text{MeOH})/n(\text{ester}) = 24.3$; reaction time = 5 h*)

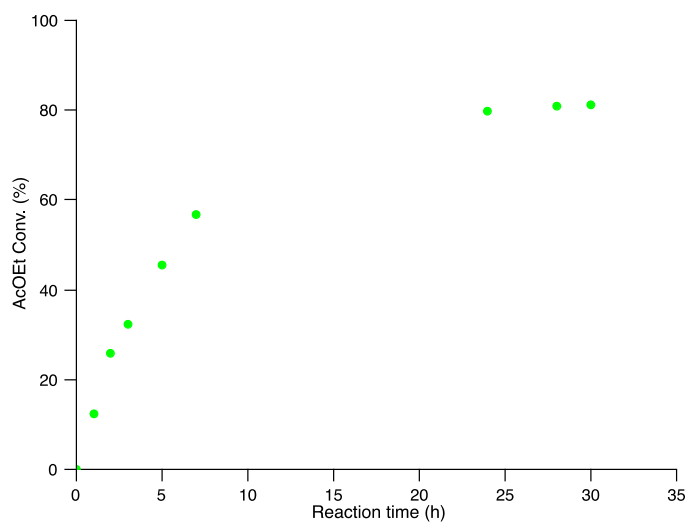


Figure S4. Conversion of AcOEt as a function of reaction time on Laponite
(*Reaction conditions: temp = 60 °C; $n(\text{MeOH})/n(\text{ester}) = 24.3$; catalyst mass = 18 mg*)

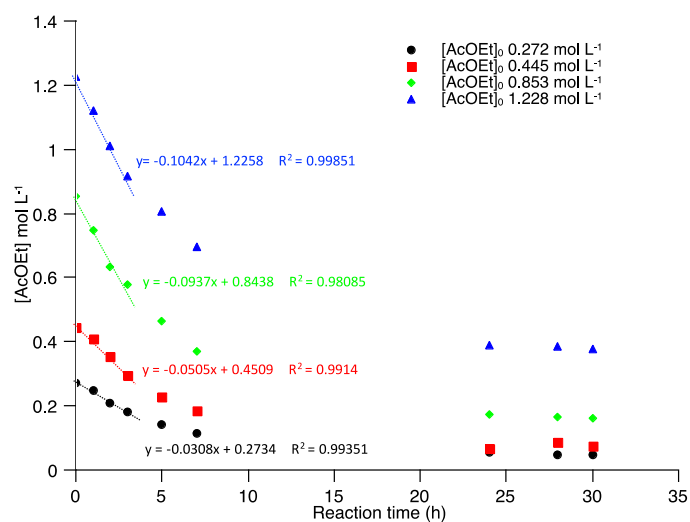


Figure S5. Evolution of AcOEt concentration with the reaction time on Laponite catalyst

Thermogravimetric analysis (TGA) for Laponite

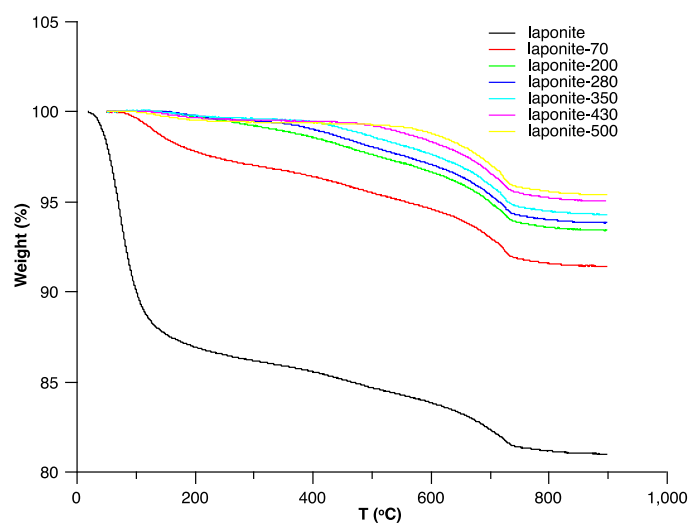


Figure S6. Thermogravimetric analysis (TGA) for Laponite and pretreated Laponite (Laponite-X)