

Fabricated Gamma Alumina-Supported Zinc Ferrite Catalyst for Solvent-Free Aerobic Oxidation of Cyclic Ethers to Lactones

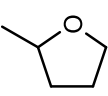
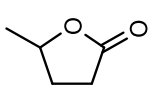
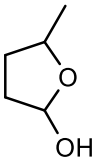
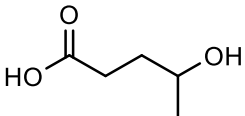
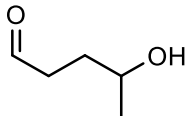

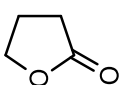
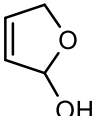
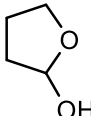
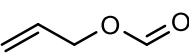


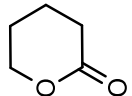
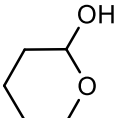
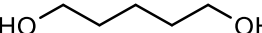
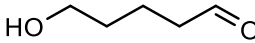

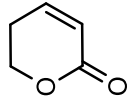
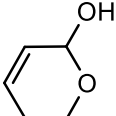
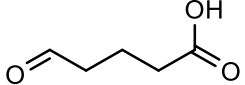
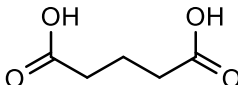

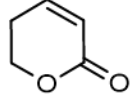
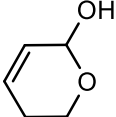
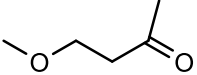
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Supplementary:

Table S1. Comparison of various catalyst-support mole ratio performances in terms of conversion and selectivity. Condition: PO₂ = 3.5 bar, substrate (THF) = 10 mL, 0.5 g catalyst, 85°C, 12 h.

Catalyst-support mole ratio	Conversion (%)	Selectivity of GBL (%)
1:1	29.6	74.4
1:2	48.1	83.9
1:3	45.3	58

Table S2. Products of cyclic ethers oxidation reaction

Entry	substrate	Product	By-products			
1						
2						Polymeric products
3		-				Polymeric products
4						
5						Polymeric products
6						Polymeric products
7	