

Vapor Phase Aldol Condensation of Methyl Acetate with Formaldehyde over Ba-La/Al₂O₃ Catalyst: The Stabilizing Role of La and Effect of Acid-Base Properties

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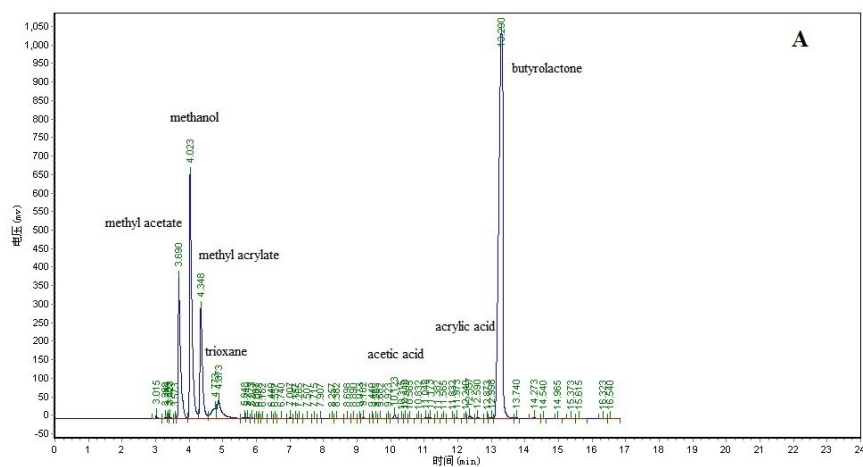
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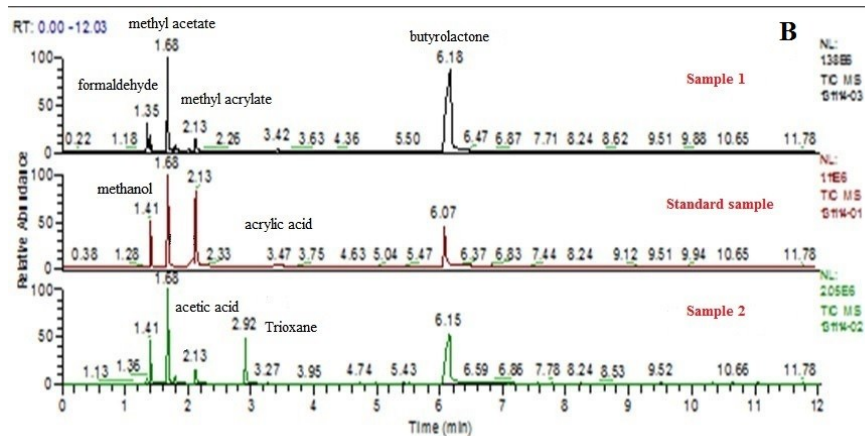


Fig. S1 the GC data for the catalytic reaction.

A: gas chromatogram of the reaction product.

B: the mass spectra of the reaction product and the standard sample.

Table S1 Summary of activity and selectivity of metal-modified Al_2O_3 catalysts.

Catalysts	Conversion (%)	Selectivity (%)			Yield (%)
		Ma	MA	AA	
Al_2O_3	34.9	80.0	5.2	14.8	27.9
5Ba/ Al_2O_3	37.9	93.4	2.0	4.6	35.4
5Ba-0.5Li/ Al_2O_3	27.6	94.4	1.4	4.2	26.0
5Ba-0.5Cs/ Al_2O_3	33.6	95.2	1.4	3.3	32.0
5Ba-0.5La/ Al_2O_3	39.5	93.9	1.7	4.4	37.0
5Ba-0.5Ce/ Al_2O_3	36.0	94.4	1.6	4.0	34.0
5Ba-0.5Zr/ Al_2O_3	38.9	92.7	2.5	4.8	36.0