

**Table S1** Catalysts for hydrodeoxygenation

Active site	Support	Temperature	Component	Products	Conversion	Ref.
MoO <sub>3</sub>	-	400	Acetone	Propylene	96.8	65[1]
			Cyclohexanone	Pentenes	100	
MoC <sub>2</sub>	-	360	m-cresol	Benzene	90	66[2]
NiMo	Al <sub>2</sub> O <sub>3</sub>	450	Acetic acid	Ethanol	65	67[3]
Pt	γ-Al <sub>2</sub> O <sub>3</sub>	300	Guaiacol	phenol	-	72[4]
Pt	HBETA SiO <sub>2</sub>	400	Anisole	benzene	90	73[5]
Pt	Al <sub>2</sub> O <sub>3</sub>	300	Guaiacol	Anisole	70	74[6]
Pt	γ-Al <sub>2</sub> O <sub>3</sub>	300	m-cresol	Toluene	74	78[7]
Fe	SiO <sub>2</sub>	400	Guaiacol	Benzene	77	79[8]
Fe	SiO <sub>2</sub> , AB	400	Guaiacol	Benzene	100	80[9]
Ga	HBETA SiO <sub>2</sub>	400	m-cresol	toluene	80	82[10]
Ru	TiO <sub>2</sub>	400	Pyrolysis vapors			83[11]
W	Carbon	380	propanol/propanal	propene	-	84[12]
Ni	Al <sub>2</sub> O <sub>3</sub>	260	1-octanol	Octenes	87.4	85[13]
Zn	Al <sub>2</sub> O <sub>3</sub>	550	Bio-oil		Benzene	86[14]
Cu	Carbon	250-450	Guaiacol	Toluene	65	87[15]
Ni <sub>2</sub> P	SiO <sub>2</sub>	300	Guaiacol	Phenol	100	93[16]

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