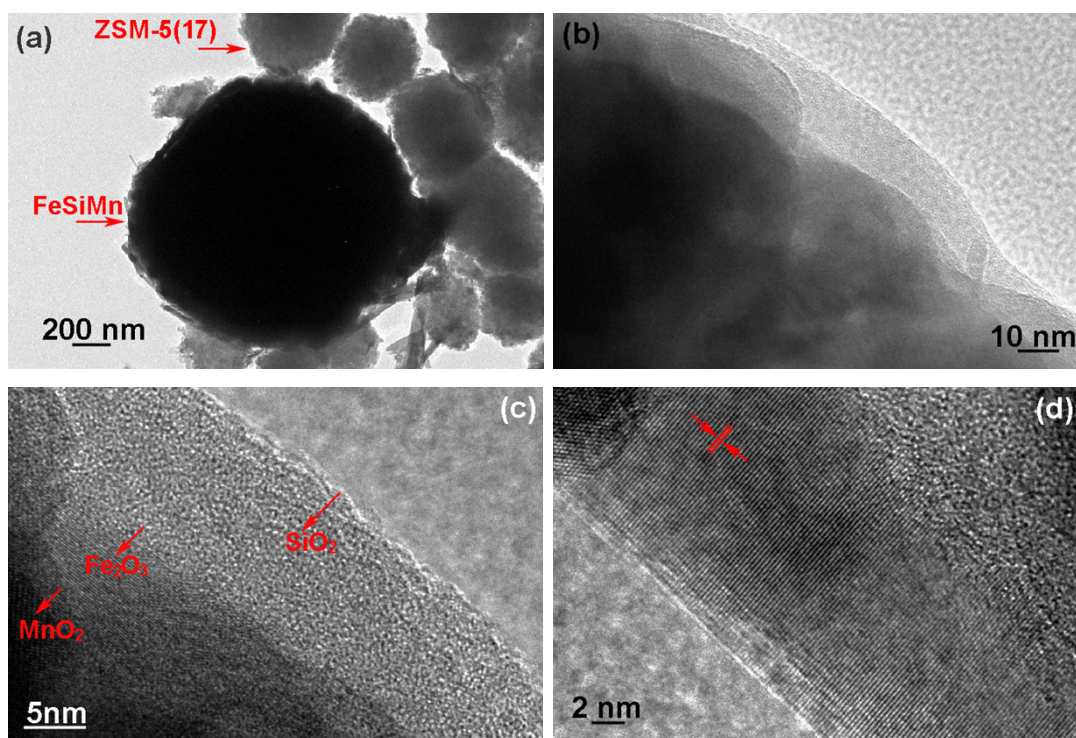


**Hierarchical porous ZSM-5 promoted FeSiMn catalyst for gasoline selectivity  
via Fischer-Tropsch synthesis: Effect of acid sites**

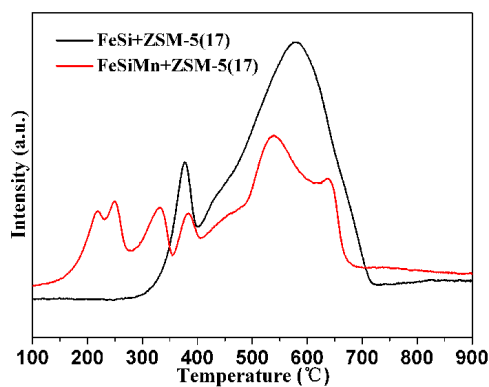
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*New Journal of Chemistry*

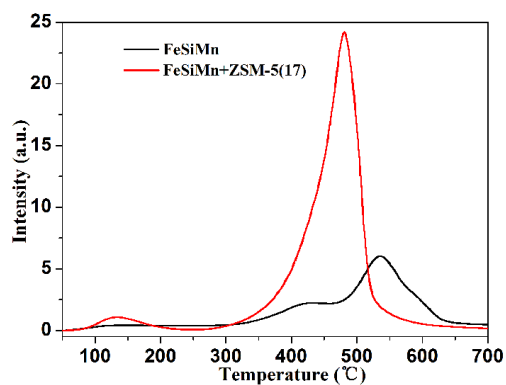
**Electronic Supplementary Information**



**Fig. S1** Electron microscopy characterization of the FeSiMn+ZSM-5(17) catalyst. (a) TEM image, (b) high-magnification TEM image, (c) and (d) HRTEM images.



**Fig. S2** H<sub>2</sub>-TPR of the synthesized samples.



**Fig. S3** CO-TPD of the FeSiMn and FeSiMn+ZSM-5(17)

**Table S1** Catalyst performance and product distribution in FTS

Catalyst	CO Conversion (%)	Hydrocarbons Selectivity (%)		
		CH <sub>4</sub>	C <sub>2</sub> -C <sub>4</sub>	C <sub>5</sub> +
FeMn-HZSM-5 <sup>30</sup>	69.9	24.1	41.6	34.3
FeZnNa@0.6-NaZSM-5 <sup>31</sup>	86.6	10.1	36.2	52.6
Fe@NaZ5 <sup>32</sup>	60.4	18.0	28.9	52.5
FeSiMn+ZSM-5(15)	73.1	13.5	24.8	61.7