

Supporting Information

Removal of manganous dithionate (MnS_2O_6) with natural MnO_2 from the desulfurization manganese slurry

Lin Yang^{†, **}, Cheng Wang[†], Lu Yao^{†, ‡}, Xia Jiang^{†, ‡}, Wenju Jiang^{†, **}, Jianjun Li^{†, ‡}

[†] College of Architecture and Environment, Sichuan University, Chengdu 610065, P.R. China

[‡] National Engineering Research Center for Flue Gas Desulfurization, Chengdu 610065, P.R.

China

*Corresponding author: L. Yang (andyiyin@sina.com) and W. J. Jiang (wenjuijiang@scu.edu.cn).

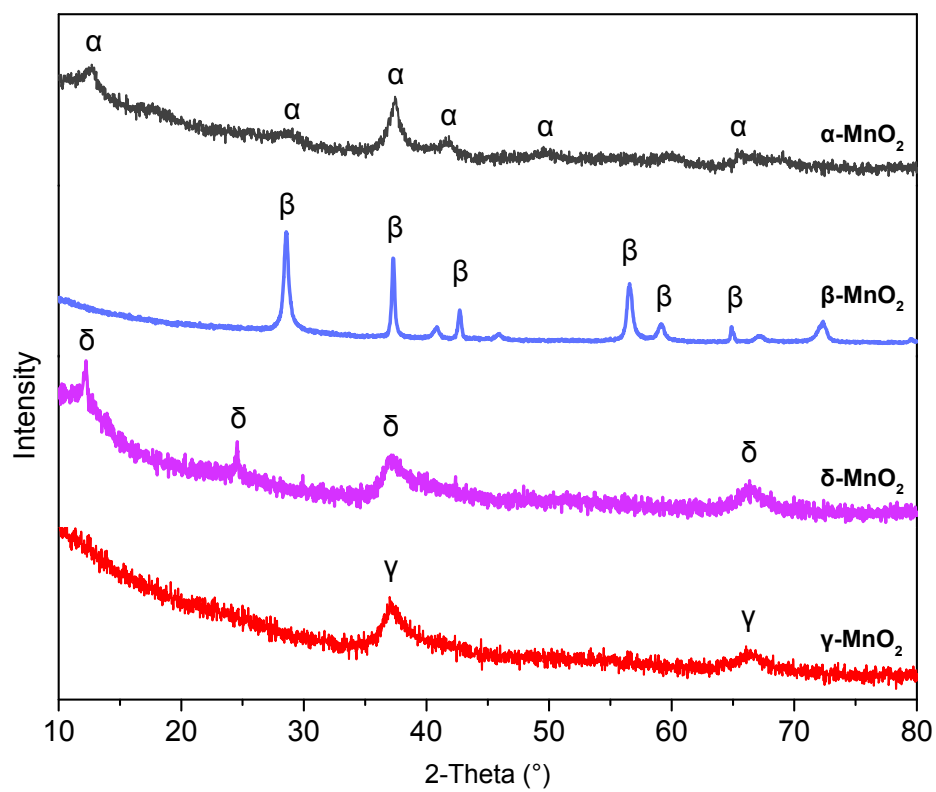


Figure S1 The XRD patterns of the prepared $\alpha\text{-MnO}_2$, $\beta\text{-MnO}_2$, $\gamma\text{-MnO}_2$ and $\delta\text{-MnO}_2$

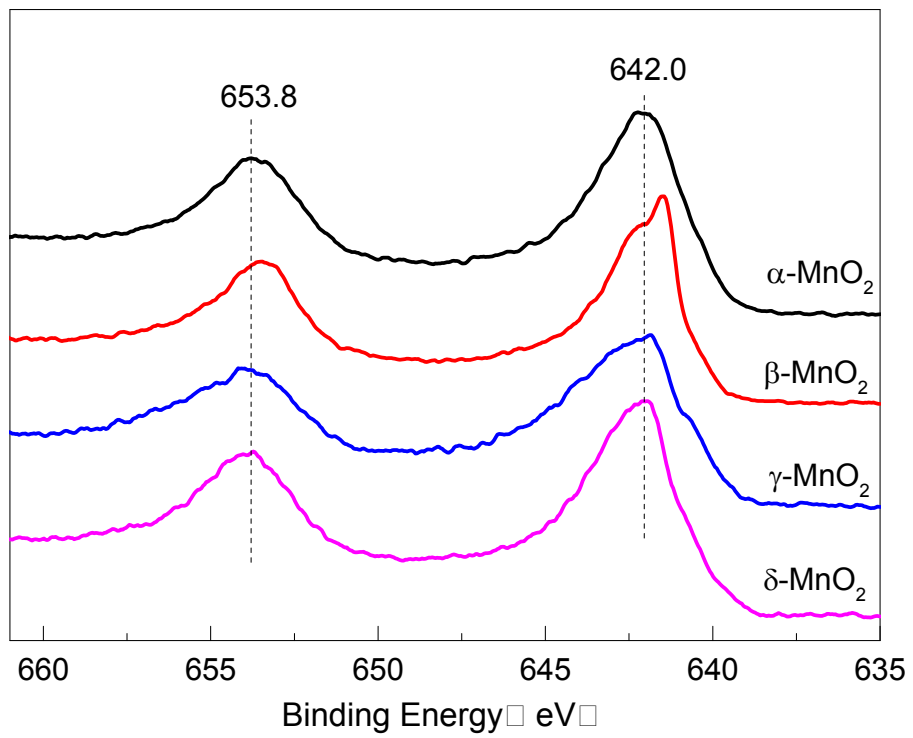


Figure S2 The Mn 2p spectrum of the prepared α -MnO₂, β -MnO₂, γ -MnO₂ and δ -MnO₂

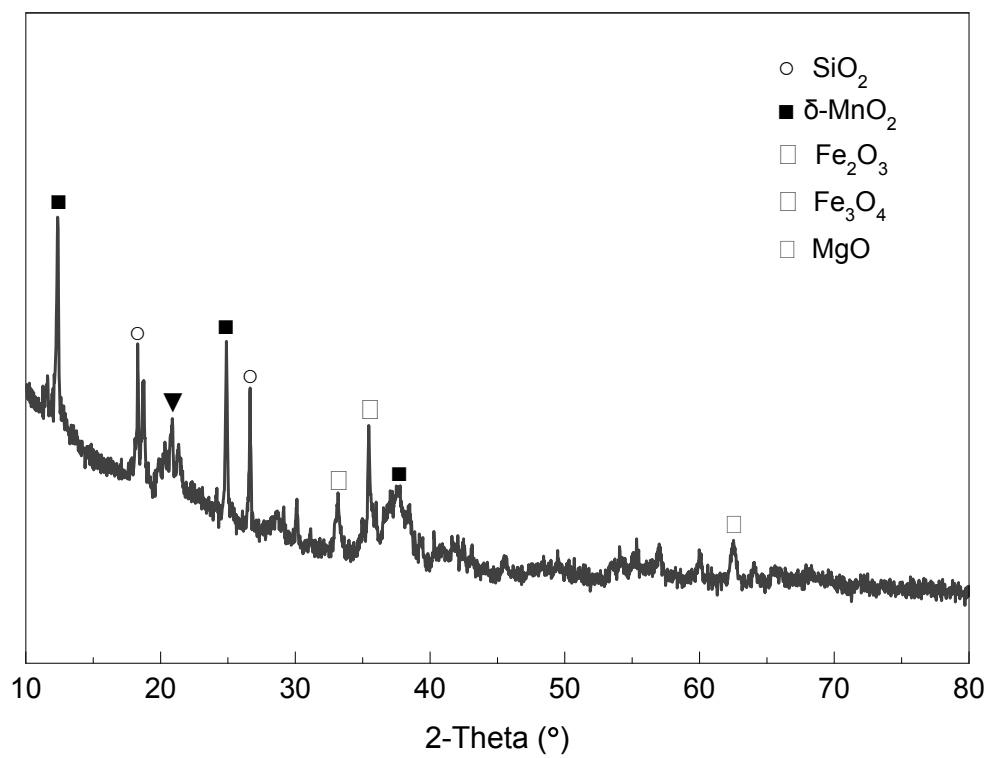


Figure S3 The XRD pattern of the natural MnO₂ ore used in this study

Table S1 The calculation of MD decomposition with different initial concentration

Initial MD (g/L)	Final MD concentration (g/L)	Removal efficiency (%)	Decomposed MD per unit MnO ₂ (mg/L·g MnO ₂)
4.00	0.14	96.40	39
6.00	0.56	90.73	54
8.00	1.13	85.81	69
10.00	1.76	82.38	82
12.00	2.28	80.96	97