In-furnace control of arsenic vapor emissions using Fe<sub>2</sub>O<sub>3</sub> microspheres with

good sintering resistance

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S1

Table. S1 BET specific surface areas of raw  $Fe_2O_3$  and tested  $Fe_2O_3$ 

	Raw Fe <sub>2</sub> O <sub>3</sub> particles	Tested Fe <sub>2</sub> O <sub>3</sub>	Tested Fe <sub>2</sub> O <sub>3</sub>	Raw Fe <sub>2</sub> O <sub>3</sub>	Tested Fe <sub>2</sub> O <sub>3</sub>	Tested Fe <sub>2</sub> O <sub>3</sub>
		particles	particles	microsphere	microspheres	microspheres
		(1000 °C)	(1300 °C)	S	(1000 °C)	(1300 °C)
BET specific	16.15	0.44		0.44	<b>.</b>	
surface area (m²/g)	16.45	0.42	-	8.13	6.09	5.32

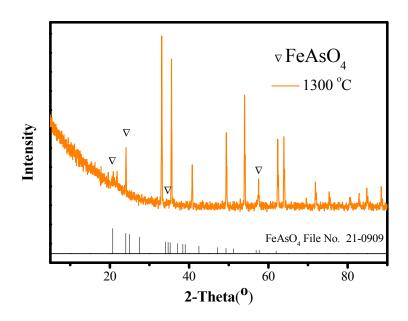


Fig. S1 XRD pattern of product obtained at 1300  $^{\rm o}C$ 

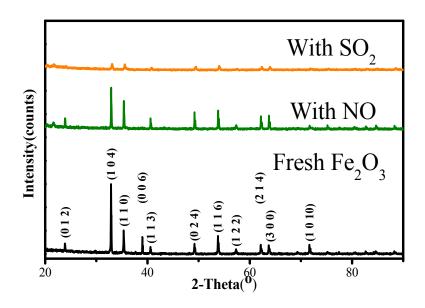


Fig. S2 XRD patterns of the fresh  $Fe_2O_3$  and tested  $Fe_2O_3$