

Electronic supplementary Information (ESI)

High-throughput centrifugal evaporation for mesoporous alumina powder synthesis via evaporation-induced self-assembly (EISA)

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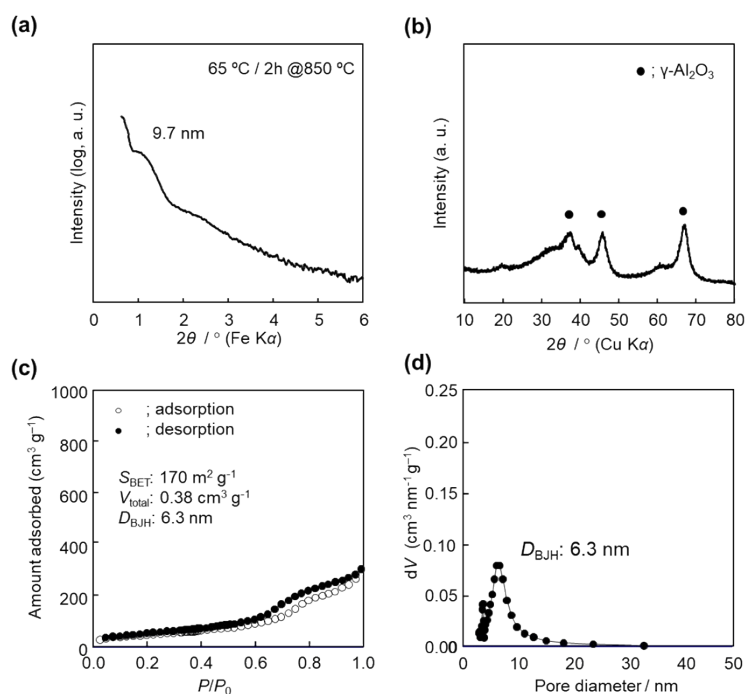


Fig. S1 (a) Low-angle XRD pattern, (b) wide-angle XRD pattern, (c) N₂ adsorption-desorption isotherm, and (d) BJH pore size distribution curve of mesoporous alumina powder prepared using centrifugal evaporator (65 °C, 2 h), followed by calcination at 850 °C.

Table S1. Relationship between sample weight in two 50 mL centrifugal tubes and evaporation time depending on evaporation temperature. Values in the parenthesis is residual weight ratio (%) based on initial sample weight.

Evaporation time / h	Sample weight /g	
	65 °C	40 °C
0	17.01 (100)	17.08 (100)
1	3.51 (21)	-
2	2.25 (13)	5.37 (31)
4	2.12 (12)	3.97 (23)
6	-	3.21 (19)

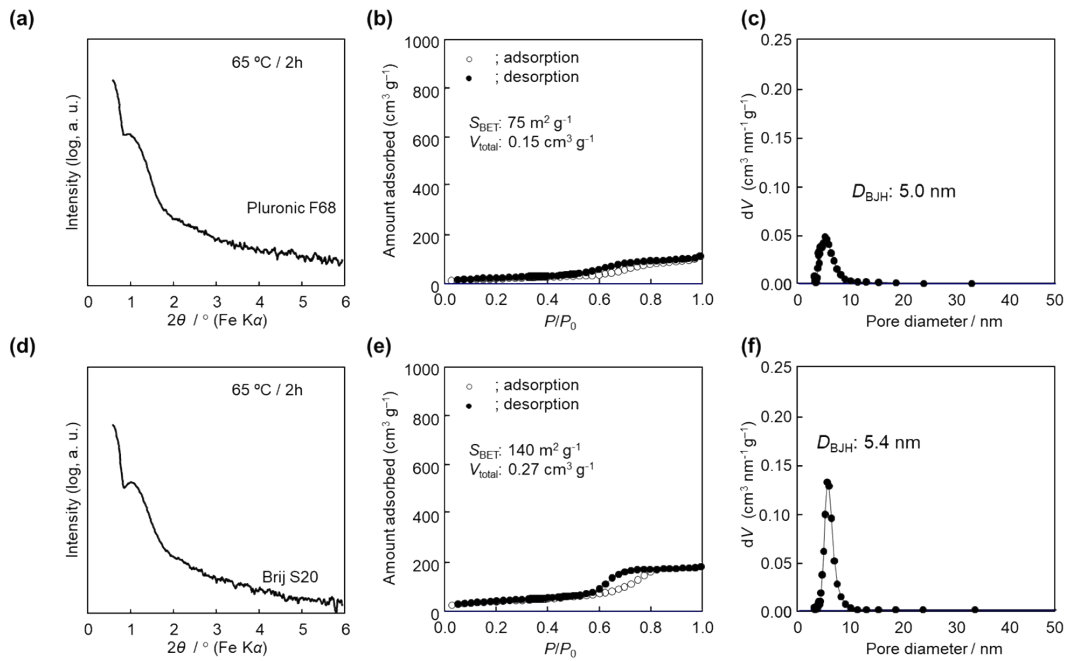


Fig. S2 (a and d) Low-angle XRD pattern, (b and e) N₂ adsorption-desorption isotherm, and (c and f) BJH pore size distribution curve of mesoporous alumina powder prepared using centrifugal evaporator (65 °C, 2 h), followed by calcination at 400 °C.

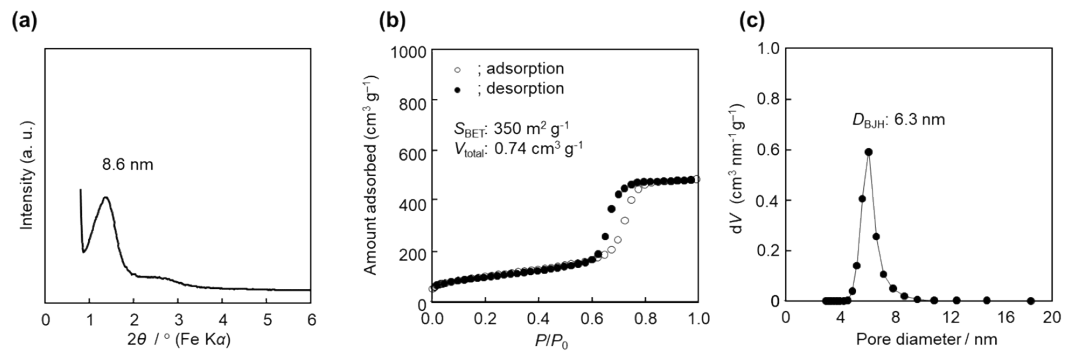


Fig. S3 (a) Low-angle XRD pattern, (b) N₂ adsorption-desorption isotherm, and (c) BJH pore size distribution curve of mesoporous alumina powder prepared using spray-dryer.