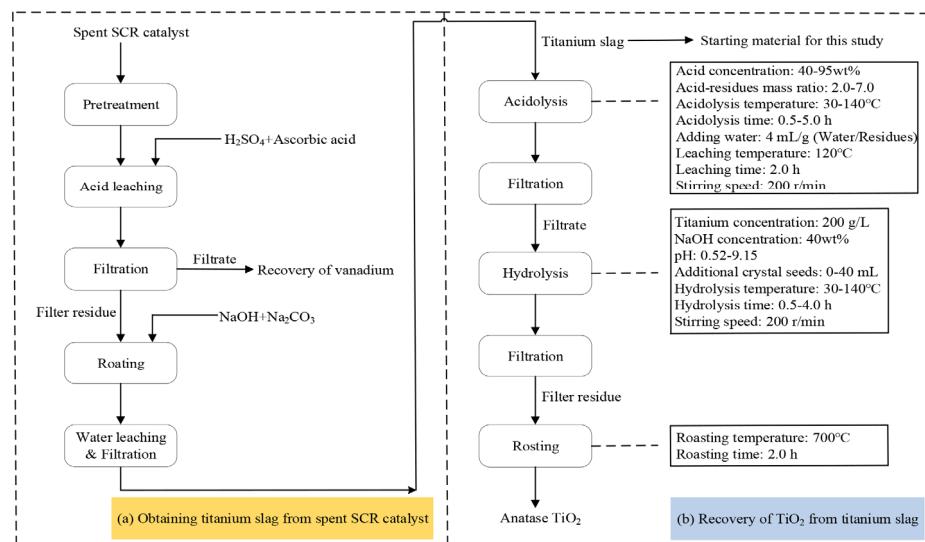
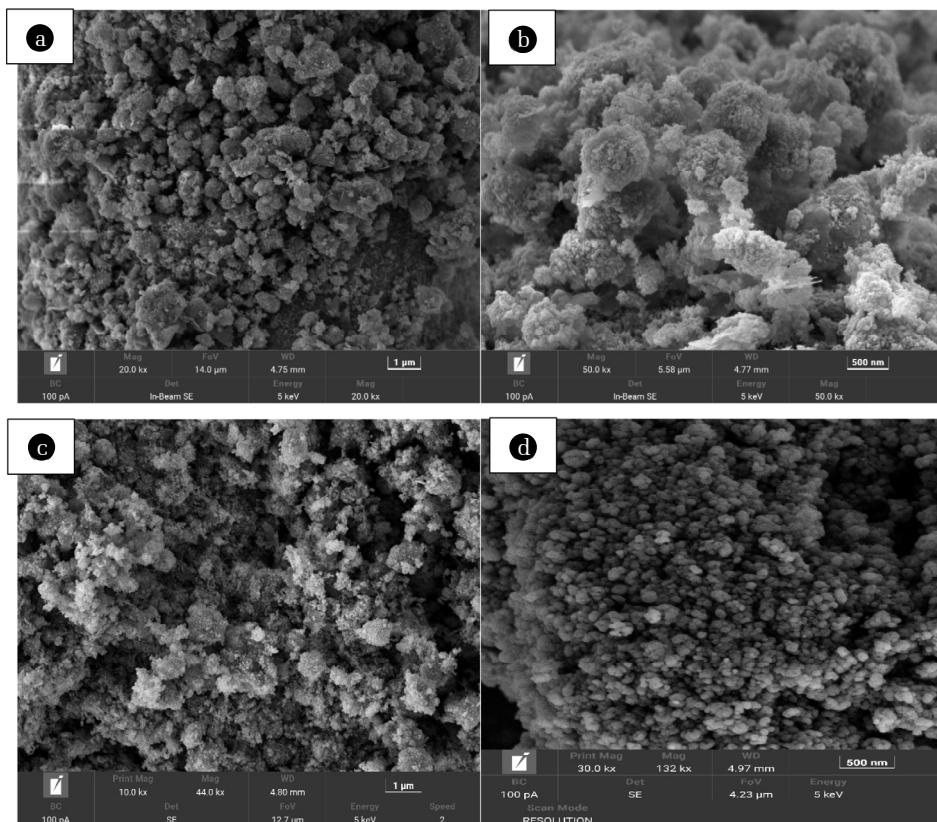


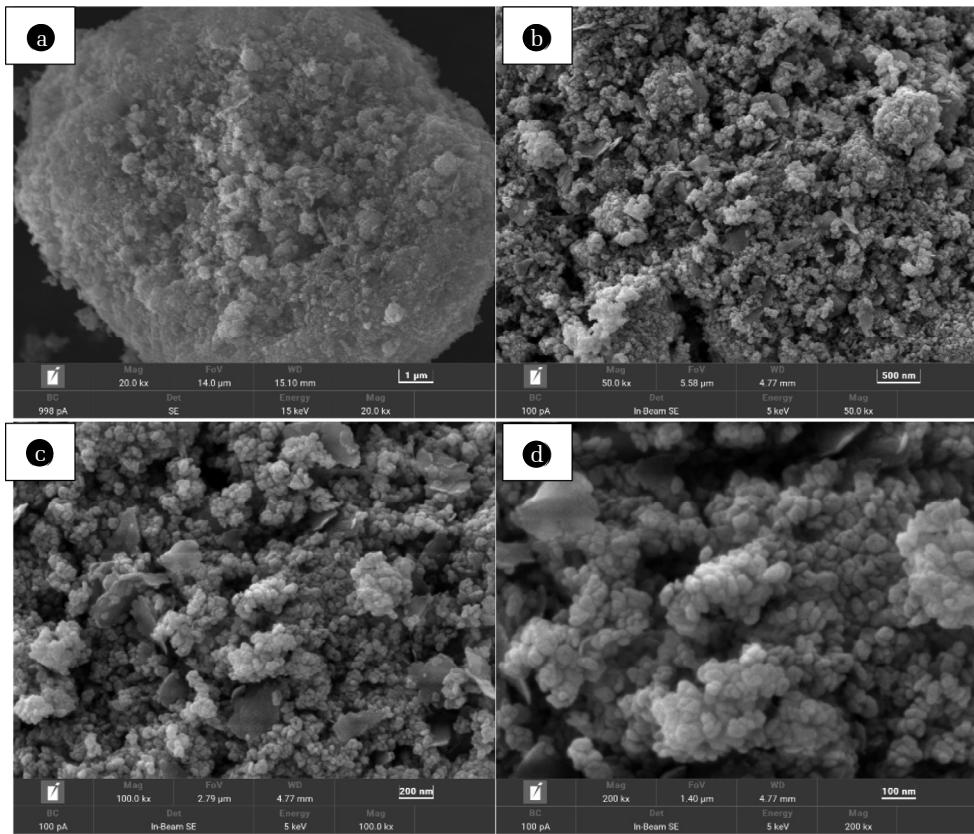
## Supplementary Materials



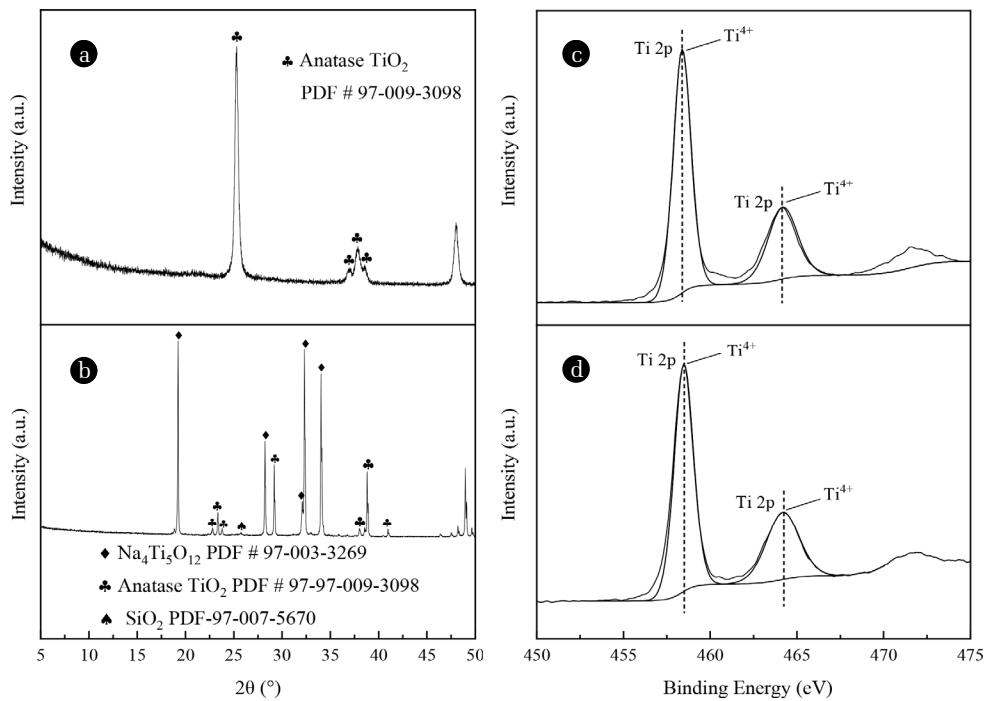
**Fig. S1.** The Brief Flow Sheet of Recycling Titanium from Spent SCR Catalyst.



**Fig. S2.** SEM Images of (a) Fresh SCR Catalyst at 500 nm Ruler; (b) Fresh SCR Catalyst at 1  $\mu$ m Ruler; (c) Titanium Slag at 500 nm Ruler; (d) Titanium Slag at 1  $\mu$ m Ruler.



**Fig. S3.** SEM Images of Spent SCR Catalyst at Different Rulers ((a) 1  $\mu\text{m}$ ; (b) 500 nm; (c) 200 nm; (d) 100 nm).



**Fig. S4.** XRD pattern of (a) spent SCR catalyst and (b) titanium slag and XPS spectra of titanium element in (c) spent SCR catalyst and (d) titanium slag.