

Electronic Supplementary Information

Sorption capacity of seaweed-like sodium titanate mats for Co^{2+} removal

Yoshifumi Kondo,^{ab} Tomoyo Goto,^{*a} and Tohru Sekino^{*a}

^a The Institute of Scientific and Industrial Research (ISIR), Osaka University, 8-1 Mihogaoka, Ibaraki, Osaka 567-0047, Japan

^b Division of Materials and Manufacturing Science, Graduate School of Engineering, Osaka University, 2-1 Yamadaoka, Suita, Osaka 565-0871, Japan

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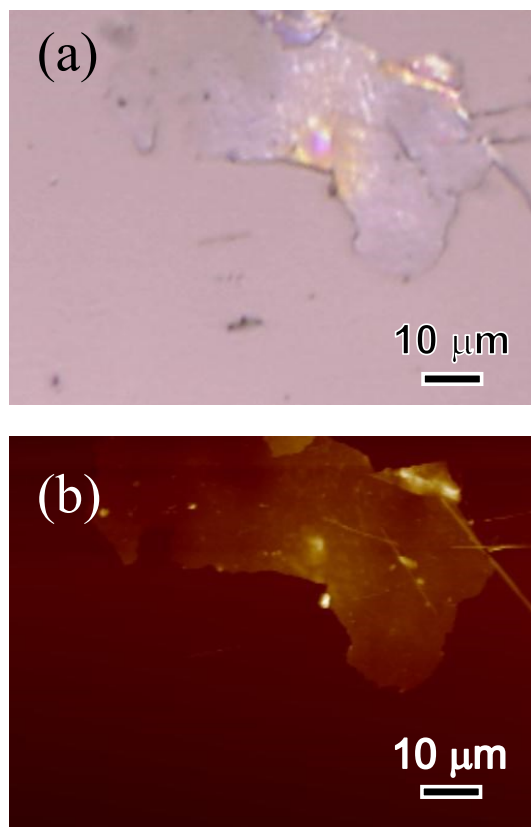


Fig. S1. (a) Optical microscope image and (b) AFM image of SST sample.

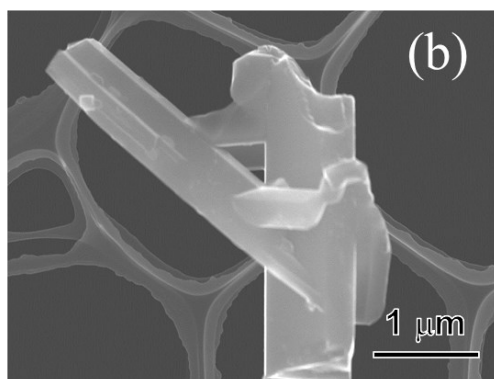
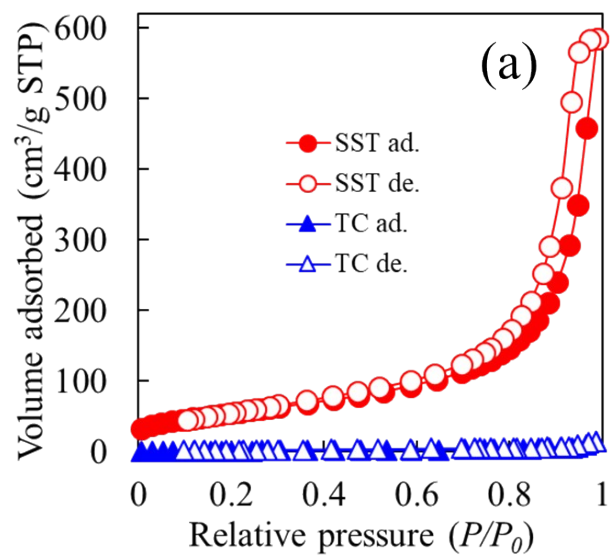


Fig. S2. (a) N_2 adsorption-desorption isotherms of SST and TC samples and (b) SEM image of TC sample.

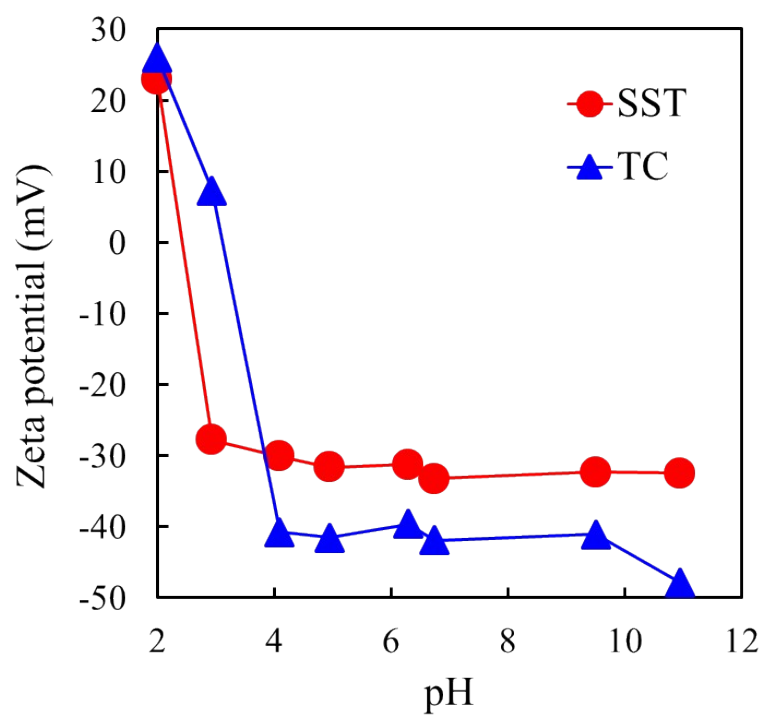


Fig. S3. Zeta potential against the solution pH of SST and TC samples at 25 °C.

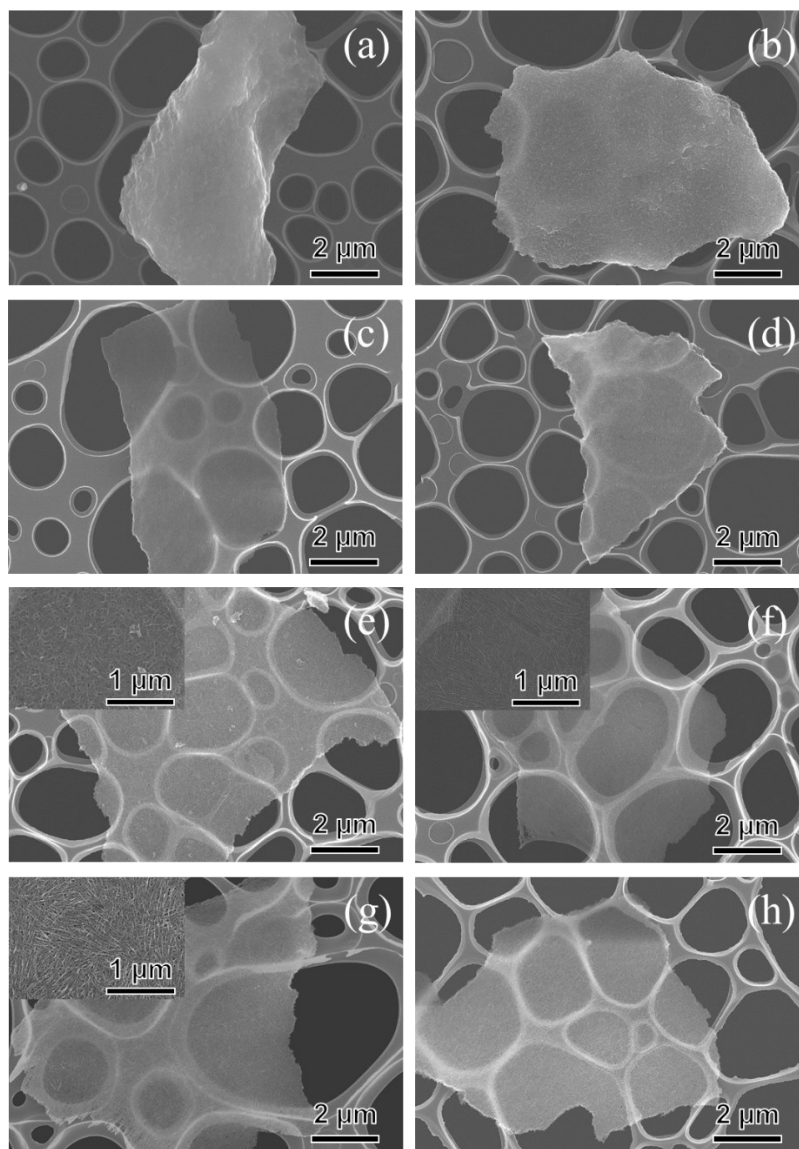


Fig. S4. SEM images of (a) SST_0, (b) SST_1, (c) SST_2, (d) SST_3, (e) SST_6, (f) SST_12, (g) SST_24, and (h) SST samples.

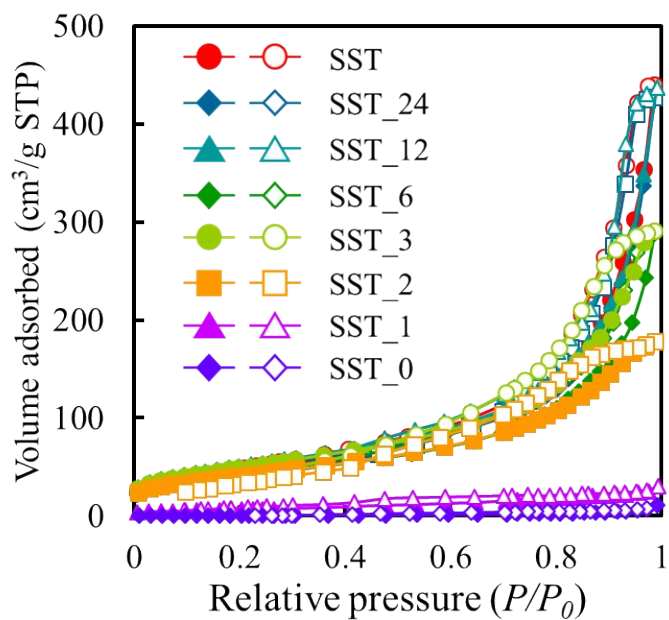


Fig. S5. N₂ adsorption-desorption isotherms of SST_X samples.

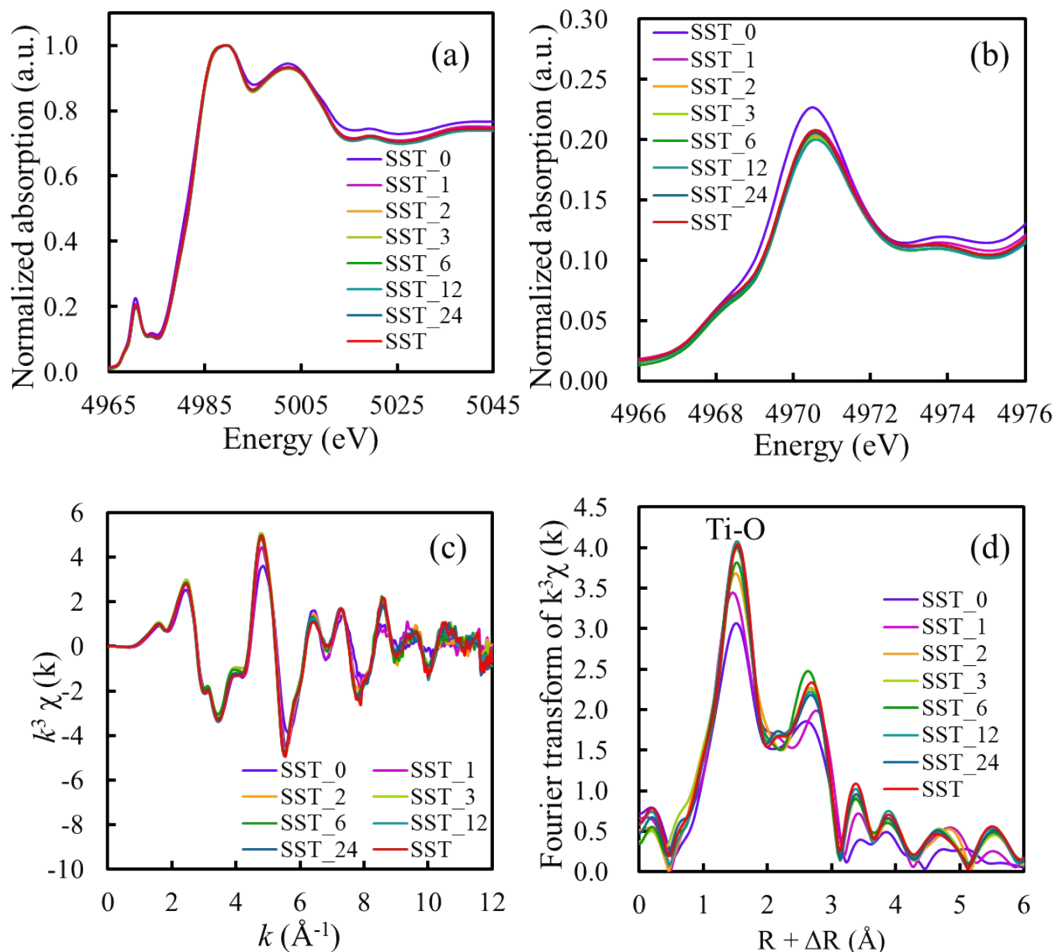


Fig. S6. Ti K-edge (a) XANES spectra, (b) pre-edge peaks, (c) EXAFS spectra, and (d) FT-EXAFS spectra of SST_X samples. Radial distribution functions were not corrected for phase shift.

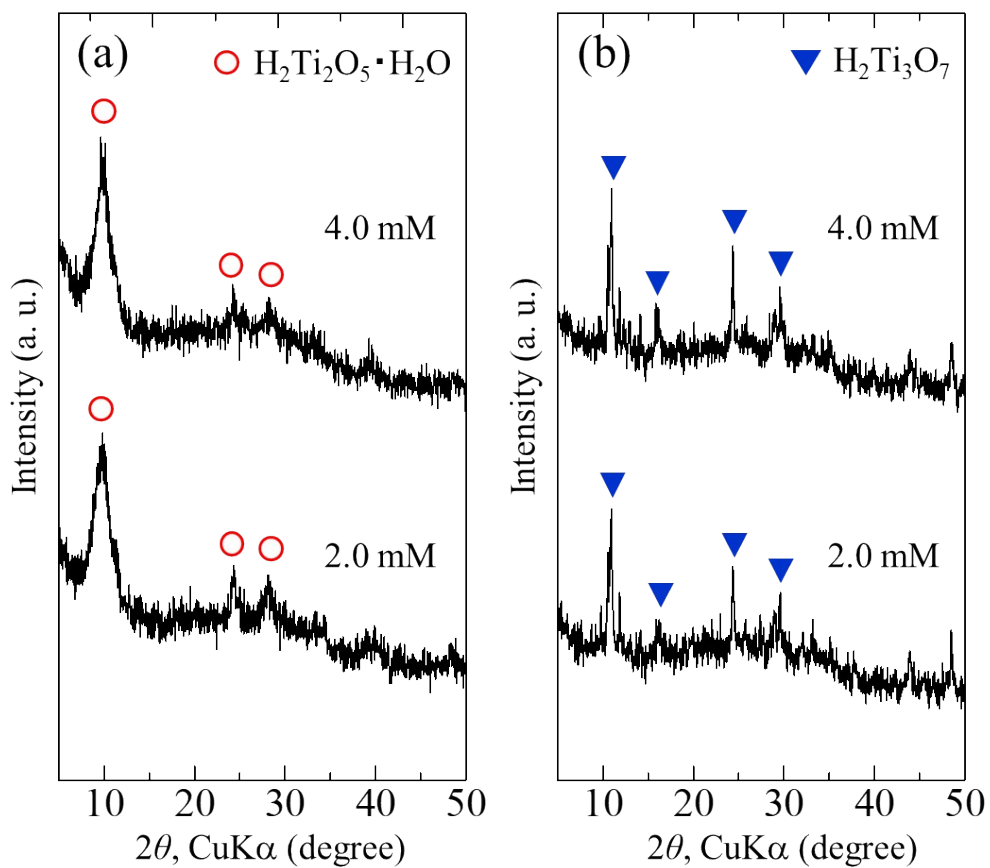


Fig. S7. XRD patterns of (a) SST and (b) TC samples after Co^{2+} sorption testing 2.0 mM and 4.0 mM cobalt nitrate.

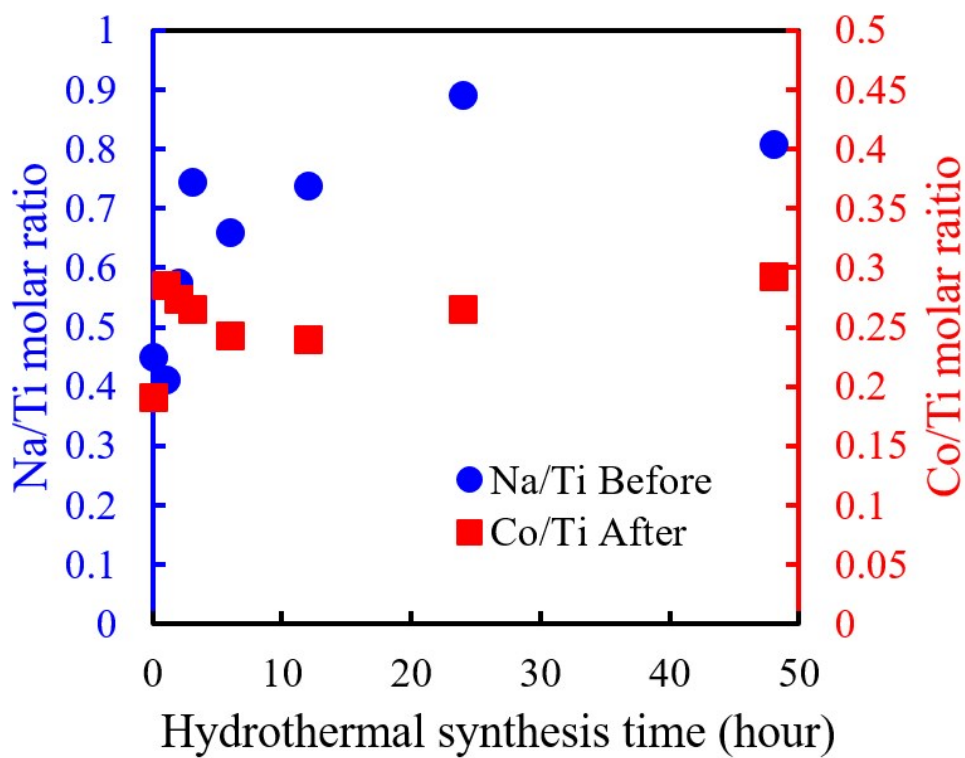


Fig. S8. Changes in Na/Ti molar ratio of SST_X samples before Co^{2+} sorption tests and Co/Ti molar ratio of SST_X samples after the tests.

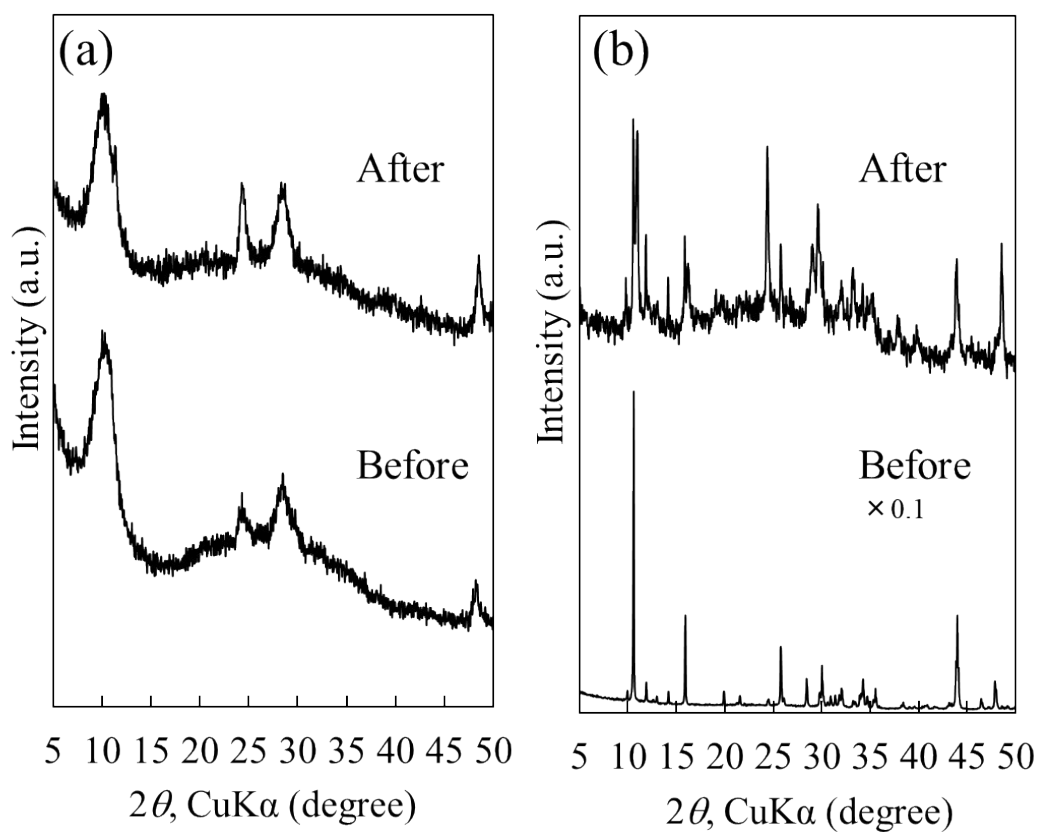


Fig. S9. XRD patterns of (a) SST and (b) TC samples after the sorption test of four-element coexistence (Co^{2+} , Ca^{2+} , Mg^{2+} , and Na^+).

Table S1. BET specific surface area of SST_X samples.

Sample	BET specific surface area [m ² /g]
SST_0	2.222
SST_1	25.23
SST_2	148.3
SST_3	178.8
SST_6	146.3
SST_12	184.2
SST_24	173.4
SST	158.3