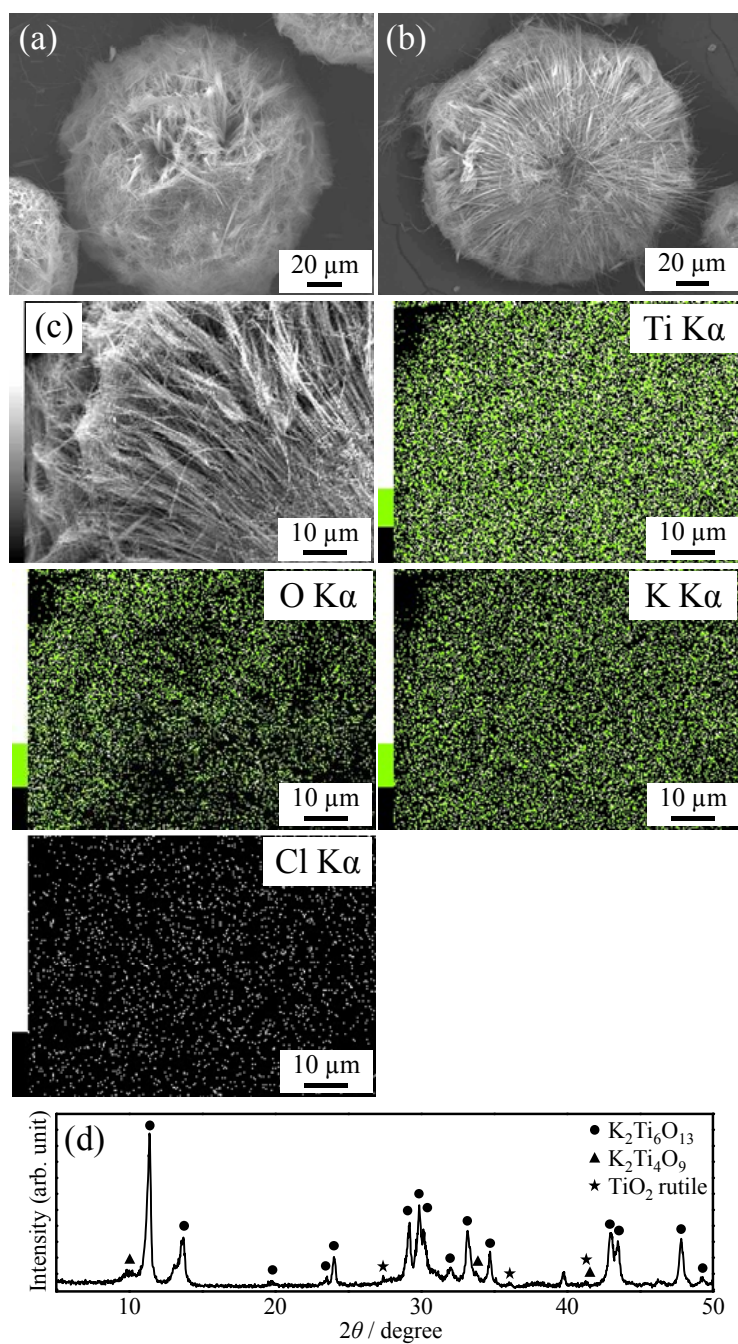


ESI 1 (a) Bright field TEM image, (b) the corresponding SAED pattern and (c) lattice image of typical $K_2Ti_4O_9$ whiskers grown from Ti powders.



ESI 2 (a) Surface and (b) cross-sectional SEM images, (c) cross-sectional FE-SEM image and the corresponding EDS mappings and (d) XRD pattern of potassium titanate whiskers grown from Ti spheres at 800 $^\circ\text{C}$ for 20 h.