

Supplementary information

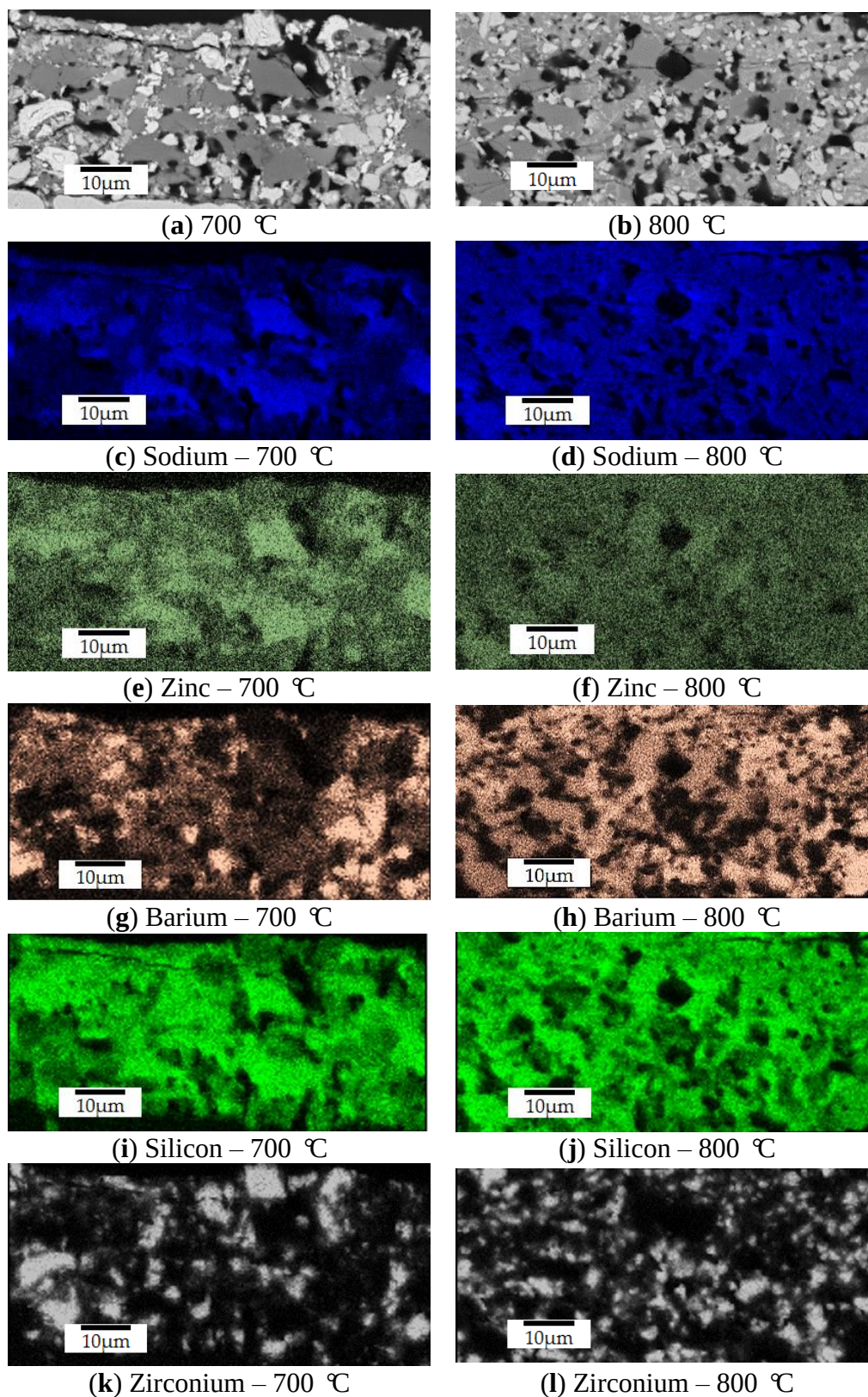


Figure S1. SEM/BSE images of the cross section of the coatings after pyrolysis at (a) 700 °C and (b) 800 °C (SEM/BSE). EDS-elemental distribution of (c-d) sodium, (e-f) zinc, (g-h) barium, (i-j) silicon and (k-l) zirconium.

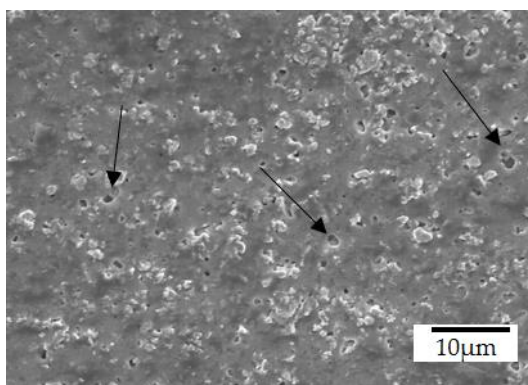


Figure S2. SEM image of the surface of the coating after pyrolysis at 800 °C in N₂-atmosphere for 1 h, indicating closed residual porosity.