Electronic Supplementary Information (ESI)

A new structure family of oxide-ion conductors $Ca_{0.8}Y_{2.4}Sn_{0.8}O_6$ discovered by a combined technique of the bond-valence method and experiments

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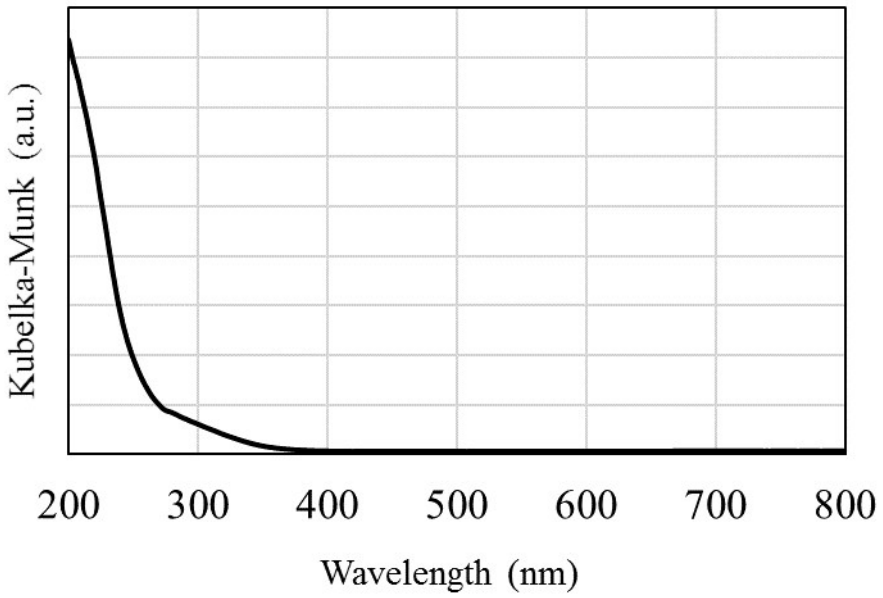

Figure S1. UV-vis diffuse reflectance spectrum of $Ca_{0.8}Y_{2.4}Sn_{0.8}O_6$.

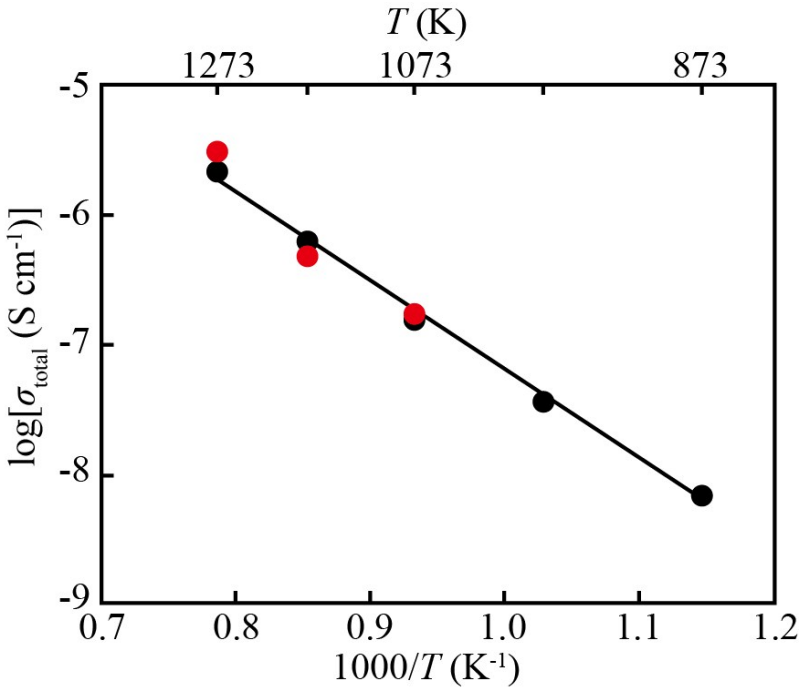

Figure S2. Arrhenius plots of the total electrical conductivity σ_{total} measured in air (black circles) and wet air (red circles) of $Ca_{0.8}Y_{2.4}Sn_{0.8}O_6$.

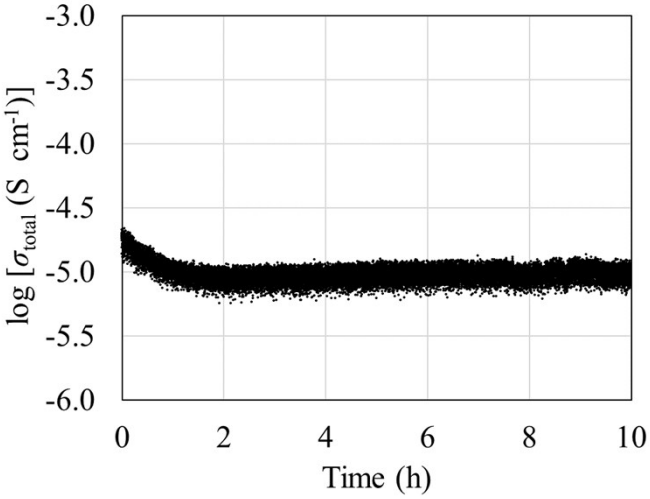

Figure S3. Time dependence of the electrical conductivity of $Ca_{0.8}Y_{2.4}Sn_{0.8}O_6$ at 1273 K.

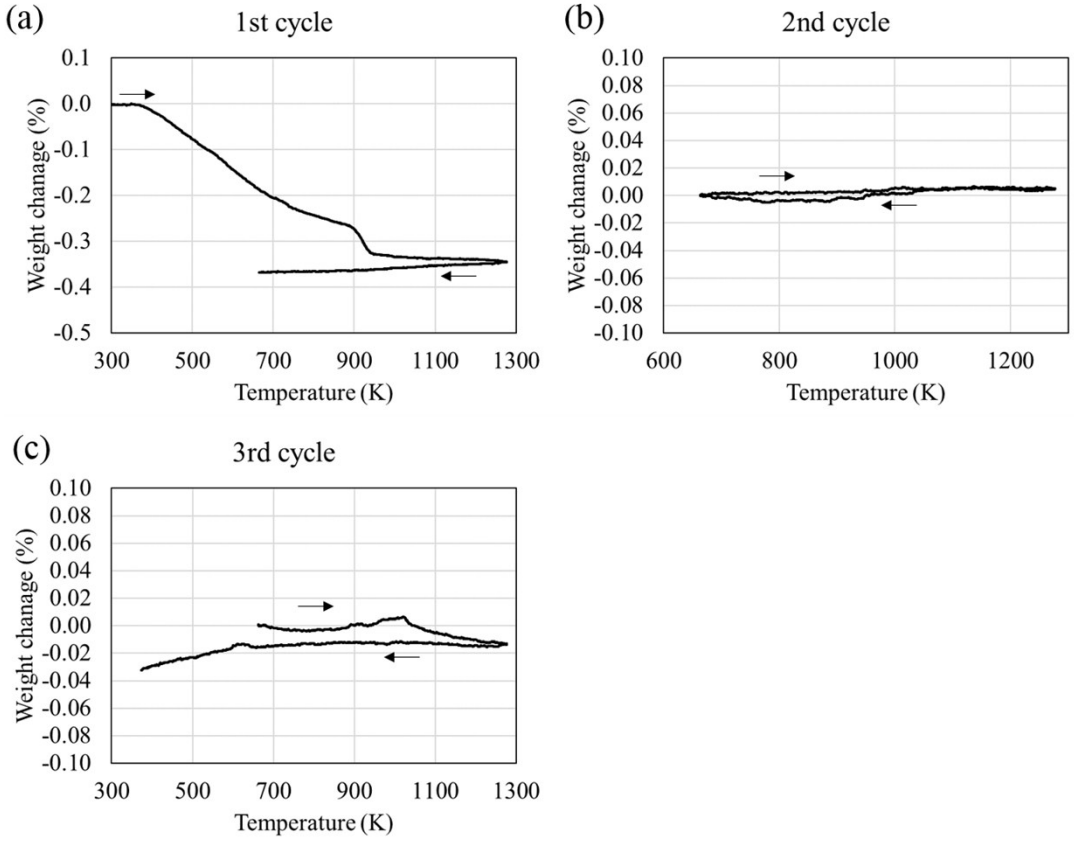

Figure S4. TG curves of $Ca_{0.8}Y_{2.4}Sn_{0.8}O_6$ during (a) 1st, (b) 2nd and (c) 3rd heating/cooling processes.

End of the Electronic Supplementary Information (ESI).