Supporting information

Ionic Conductivity Increased by Two Orders of Magnitude in Micrometer-Thick Vertical Yttria-Stabilized ZrO_2 Nanocomposite Films

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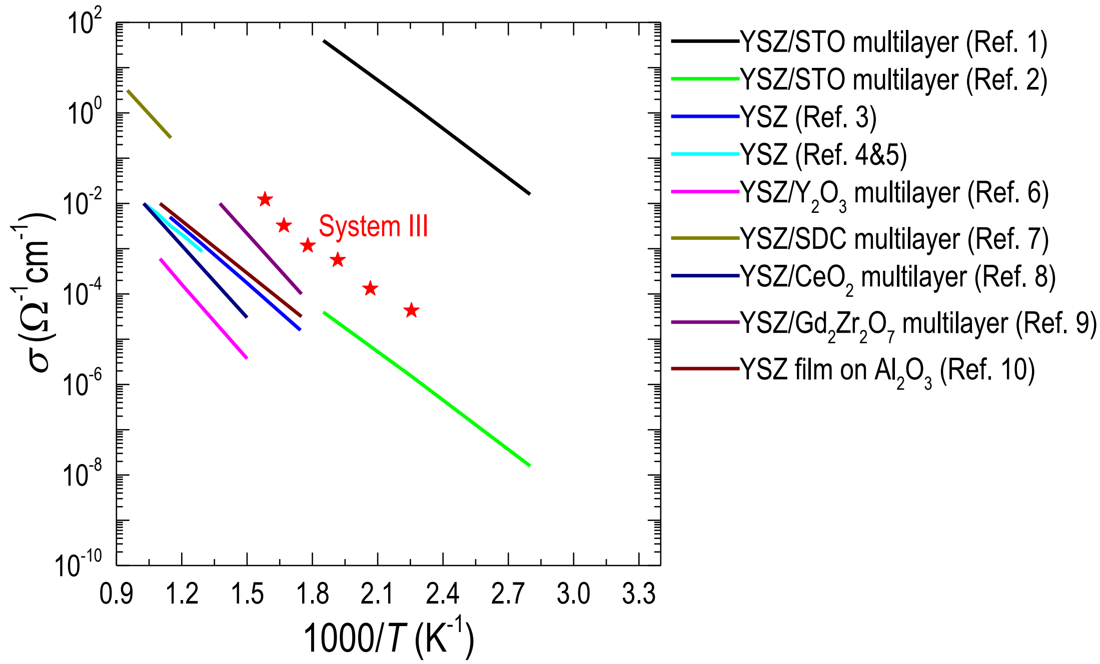

Figure S1. Comparison of ionic conductivities in system III (YSZ-STO/SDC-STO double layered nanoscaffold films) and other YSZ nanostructures. Although YSZ/STO multilayer films (Ref. 1, black line) seem to have higher ionic conductivity than our nanoscaffold films, there have been many debates on the calculation of their ionic conductivity. Guo *et al.* (Ref. 2, green line) reconsidered the ionic conductivity in YSZ/STO multilayer films and found that it should be lowered by six orders of magnitude.

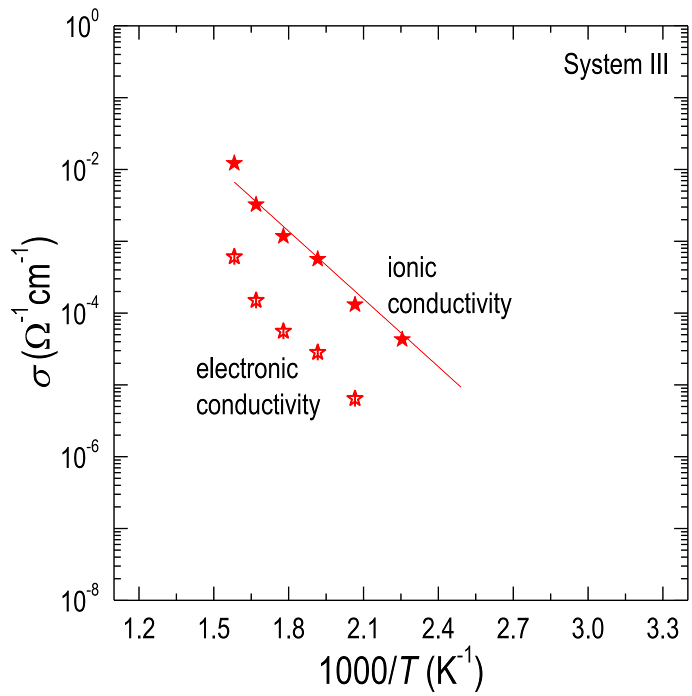

Figure S2. Comparision of ionic and electronic conductivities in system III (YSZ-STO/SDC-STO double layered nanoscaffold films).

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