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Abstract

$La_2(Zr_{0.7}Ce_{0.3})_2O_7$ (LZ7C3) has attracted great interest for thermal barrier coatings (TBCs) because it presents extremely low thermal conductivity, high thermal stability and is more resistant to sintering than yttria stabilized zirconia (YSZ). In the present study, an LZ7C3/YSZ double-ceramic-layer (DCL) TBC was deposited by electron beam-physical vapor deposition (EB-PVD) and the TBC system was