

List of Tables

Table 3.1 Standard JCPDS data for monoclinic and cubic phase of HfO ₂ and refined cell parameters for Hf _{1-x} Dy _x O ₂ (x = 0 and 0.11).....	57
Table 4.1 Refined cell parameters and cell volume for Hf _{1-x} Sm _x O ₂ (x = 0 and 0.12) compared with standard JCPDS data for monoclinic and cubic phase of HfO ₂	84
Table 5.1 List of synthesized samples with various compositions of xDy,ySm:HfO ₂ powders with low dopant concentration.	102
Table 5.2 The average distance (R) between different neighboring ion pairs for varying Sm concentration in HfO ₂ nanoparticles.....	117