

ABSTRACT

A capacitor and a DRAM device, the capacitor including a lower electrode; a dielectric layer structure on the lower electrode, the dielectric layer structure including a first zirconium oxide layer, a hafnium oxide layer, and a second zirconium oxide layer sequentially stacked; and an upper electrode on the dielectric layer structure, wherein the hafnium oxide layer has a tetragonal crystal phase or an orthorhombic crystal phase.

FIG. 1