$BaCO_3 + (0.8)ZrO_2 + (0.1)Gd_2O_3 \longrightarrow$ Pressure 3000 PSI 1550 °C Covered with BaZrO₃ + BaCO₃ 1300 °C powder Sintered "target" to be BaCO₃ + Annealing in air used for PLD $ZrO_2 + Gd_2O_3$ powders in mortar and

pestle

$BaZr_{0.8}Gd_{0.2}O_{2.9} + CO_{2}$

