

METHOD FOR PREPARING HIGH-DENSITY MAGNESIA-ALUMINA SPINEL CERAMIC BY LOW-TEMPERATURE PRESSURELESS SINTERING

Abstract

A method for preparing high-density magnesia-alumina spinel ceramic by low-temperature pressureless sintering, comprises: using MgAl_2O_4 powder as a raw material powder, adding calcium phosphate as a sintering aid and controlling the calcium element of the calcium phosphate to not exceed 500 ppm of the total mass of the raw material powder; and then performing pressureless sintering, thereby preparing a high-density magnesia-alumina spinel ceramic; the pressureless sintering includes normal pressure sintering or vacuum sintering.

[Figure 2]