Synthesis of Submicron $CaZrO_3$ in Combustion Reactions

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Abstract—Submicron $CaZrO_3$ powder is obtained in combustion reactions (solution combustion synthesis—SCS) with glycine. It is found that SCS reduces the sintering temperature of $CaZrO_3$ powders. The dielectric properties of calcium zirconate ceramics are studied by the electrochemical impedance method. It is shown that a ceramics of powders obtained by the SCS method has high dielectric characteristics.

Keywords: calcium zirconate, ceramics $CaZrO_3$, SCS, combustion temperature, resistivity, dielectric permittivity.

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