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ABSTRACT BOOK

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Electrical properties of mechanochemicaly activated cordierite ceramics

Three-component oxide mixture was prepared containing $MgO+Al_2O_3+SiO_2$ in a 2:2:5 ratio with addition of 10% Bi2O3. Mixtures were mechanically activated in range from 5 to 240 minutes in a mill with ceramic balls, and sintered at range from 1173-1573 K. In order to determine the structure transformations, sintered products were analyzed by the XRD method. The goal of presented research was to find the possible correlation between process parameters and functional properties of the cordierite based ceramic materials. Quantitative measures of the functional sample properties, capacity (Cc) and electrical resistance (RJl) as well as of dielectric loss (tgd) were used. The results obtained proved that there is a correlation between mechanical activation and properties of cordierite ceramics.