

The invention relates to the branch of super conductivity. The method includes preparation of initial solution of component metal salts of high-temperature superconductive coating in an low dielectric capacitivy-organic solvent , applying it to a substrate with the following thermal decomposition and anneal. The initial solution is prepared from component metal carbonate mixture of high-temperature superconductive coatings and fatty acid (C_8 and higher) solution taken in excess in an organic solvent – alcohol (C_4 - C_{18}) or aromatic hydrocarbon (C_7 , C_8) at the temperature of 100-110 °C and thermal decomposition is carried out in the air at high-speed heating to the temperature of 840-920 °C and allowance for 20-30 s.