

Radiation from Relativistic Electrons in Periodic Structures "RREPS-23" & Electron, Positron, Neutron and X-ray Scattering under External Influences "Meghri-23"



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Some new ways to obtain high temperature superconductors

In a huge number of works on the synthesis of high-temperature superconductors (HTSCs), two main directions are distinguished: works on the synthesis of new superconductors ([1] -as well as references therein), and works on the development of new methods for improving the physical parameters of traditional HTSC materials [2-4].

In this paper, we consider three methods for the synthesis of HTSC ceramic samples under the influence of external acoustic waves:

- a) Shock-wave compression of a powder mixture before synthesis.
- b) Creation of acoustic waves on the surface of the HTSC sample during sintering in a furnace. The idea was proposed by a member. corr. NAS of Armenia, Academician A.R. Mkrtchyan.
- g) The use of dopant powdered HTSC impurities before

Reference

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