The Theory Of Self-Propagating High-Temperature Synthesis of Functionally Gradient Materials

V.K. Smolyakov and V.G. Prokofiev

Department for structural macrokinetics of Tomsk Scientific Center
Siberian Branch of the RAS, 634021 Tomsk

The combustion of nonuniform mixtures containing inert component is investigated numerically applied to the problem of self-propagating high-temperature synthesis of functional graded materials. Characteristics of the synthesis depending on the amount and properties of the inert component are analyzed.