

Some features of SHS-process in the multilayer Ti/Al foils

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ABSTRACT

The process of SHS in multilayer nano-foils Ti/Al and Ti/3Al was studied experimentally using a digital high-speed video camera attached to a microscope. Average and instant values of combustion velocity were measured. The results showed that gasless combustion occurs in a quasi-homogeneous mode, however, and a significant spread of the instant velocity values was revealed.