

Ignition of forest fuel by the carbonaceous particle heated up to high temperatures

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Keywords: *ignition delay time, carbonaceous particle, forest fuel, limiting conditions.*

Abstract

Experimental research of ignition process of forest fuel layer by the carbonaceous single particle heated up to high temperatures is carried out. Dependences of ignition delay time of forest fuel on initial temperature of ignition source which has been modeled by graphite samples in the form of a parallelepiped are obtained. Limiting conditions of pine needles ignition by carbonaceous particles are established.