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Conditions for thermal initiation mechanism of explosion of high energy materials with laser power

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Abstract

We examine the conditions of the mechanism of thermal explosion initiation of high energy materials by pulsed laser radiation with light-absorbing particles of different geometry. It is shown that the efficiency of light-absorbing spherical particles is maximum at the average particle size. Flat geometry of the light-absorbing layer is more efficient, the maximum efficiency being achieved with its minimum thickness.

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