

## Research Progress of Solid Extinction Materials in Anti-infrared Smokescreen

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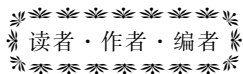
**Abstract:** The development of high efficiency and environmental protection type anti-infrared smokescreen has attracted wide attention at home and abroad. For this reason, all countries in the world actively develop low-toxic solid infrared extinction materials. Now metals, new carbon materials and anti-infrared composites are reported. In this paper, the research status of infrared extinction characteristics of solid aerosol particles is introduced. The research progress of the above-mentioned three kinds of materials is reviewed. It is pointed out that simulation study on extinction characteristics of aerosol particles, nano carbon materials and metal film composites are still the key research directions in the future. It is suggested that nano infrared absorbing materials, absorbing materials with one-way transparency and metallized biosome infrared absorbing materials should be actively focused on and explored. These materials are expected to become a new generation of anti-infrared materials in smokescreen. 63 references are attached.

**Key words:** smokescreen; solid aerosol particles; infrared extinction materials; environmental protection

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## 《含能材料》“损伤与点火”专栏征稿

含能材料的损伤特征与点火过程有密切的联系,炸药、推进剂的内部损伤及其对力学特性、安全特性和点火行为的影响规律受到了含能材料学界的高度重视,为推动这一重要研究方向的学术交流,本刊特设立“损伤与点火”专栏。专栏主要征集炸药、推进剂等含能材料的损伤观测与多尺度表征技术、含损伤的本构方程、准静态与动态损伤演化规律、损伤与破坏的宏(细)观模式、损伤对起爆、爆炸、爆轰成长以及非冲击起爆行为的影响等方向的原创性研究论文。来稿请注明“损伤与点火”专栏。