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石墨烯在含能材料中的应用研究进展 分享到：

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Title: Research Progress on Application of Graphene in Energetic Materials

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摘要: 从石墨烯及其复合物催化剂、石墨烯添加剂和石墨烯及其复合含能材料等3个方面，介绍了近年来石墨烯在含能材料应用方面的最新研究进展。认为石墨烯及其复合催化剂对推进剂含能组分具有明显的催化作用；添加石墨烯后，推进剂燃烧及力学性能得到改善；氧化石墨烯及石墨烯构成的钝感剂可降低含能材料的机械敏感度；石墨烯及其复合物含能材料具有优异的性能，更大的能量释放率。提出了石墨烯在含能材料领域的发展方向和应用前景。附参考文献42篇。

Abstract: The latest research progresses in recent years on the application of graphene in energetic materials were introduced from graphene and its composite catalysts, graphene additives, graphene and its composite energetic materials etc. It is considered that the graphene and its composite catalysts possess obvious catalytic effect on the energetic components of propellants. The burning rate and mechanical properties of propellant are improved after adding graphene. The insensitive agents composed of graphene oxide and graphene can reduce the mechanical sensitivity of energetic materials. Graphene and its composite energetic materials have excellent properties and larger release rate of energy. The development direction and application prospect of graphene in energetic materials are proposed with 42 references.

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