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## Review on Interfacial Bonding Improving of TATB-based PBX

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**Abstract:** The progress on the methods of improving the interfacial bonding for TATB-based polymer bonded explosive (PBX) in recent years was reviewed. The selection principle for an appropriate binder and how to effectively evaluate the interfacial bonding from the point of TATB molecular structure, as well as the molecular simulation of the interface interaction between TATB and fluoropolymer were summarized. Meanwhile the effect of the surface modification of TATB and coupling agents on the interfacial bonding were mainly described. At last, three key research directions are stated: the structural design of binder, the addition of coupling agents and the new coating method.

**Key words:** interfacial bonding; TATB; polymer bonded explosive (PBX); fluoropolymer

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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。

《含能材料》编辑部