

[1] 杨莉,张庆明,时党勇.爆炸成型模拟弹丸对水介质侵彻的数值仿真[J].弹箭与制导学报,2009,2:117.

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## 爆炸成型模拟弹丸对水介质侵彻的数值仿真 [\(PDF\)](#)

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Title: Numerical Simulation for the Penetration of Explosively Formed Projectile into Water

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关键词: 爆炸力学; 数值模拟; 爆炸成型弹丸; 侵彻

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摘要: 应用大型有限元分析软件ANSYS / LS—DYN A, 对爆炸成型模拟钢弹丸侵彻水介质进行了数值仿真计算, 分析了形状和入水速度对弹丸侵彻性能的影响, 给出了弹丸水中运动速度衰减规律, 为下一步设计能形成较好水下弹道特性和侵彻效果的鱼雷战斗部装药结构提供参考。

Abstract: The penetration process of an explosively formed projectile si mulation i nto water is conducted by usi ng the large—scale fi nite ele ment analysis soft ware ANSYS / LS—DYN A. The i nfluences of shape and velocity of projectile on pen—etration is analyzed . The velocity decrease of projectile movi ng i n the water is also studied . So me valuable advices are given for the design of the shape charge configuration of torpedo warheads which have good underwater trajectory char—acteristics and termi nal effect .

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本期目录/Table of Contents

下一篇/Next Article

上一篇/Previous Article

工具/TOOLS

引用本文的文章/References

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