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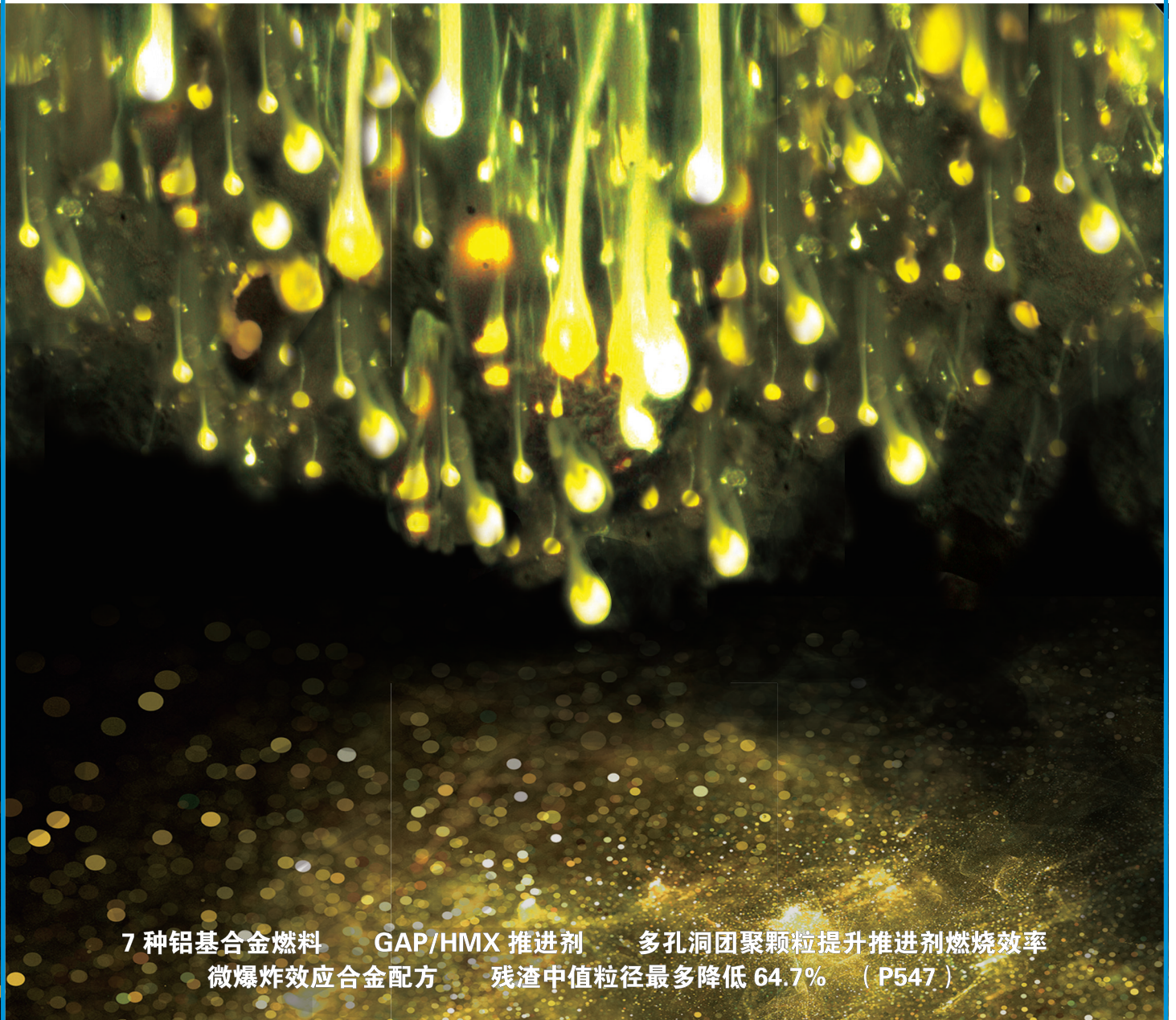
GUTI HUOJIAN JISHU

固体火箭技术

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7种铝基合金燃料 GAP/HMX推进剂 多孔洞团聚颗粒提升推进剂燃烧效率
微爆炸效应合金配方 残渣中值粒径最多降低64.7% (P547)

固 体 火 箭 技 术

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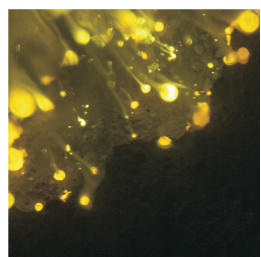
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铝合金燃料对低燃速 GAP/HMX 推进剂燃烧效率的影响

胡云逸,钱勛,周梦圆,王贵州,杨洁,刘雄,杨品高,张鑫,汪越

为使 GAP/HMX 推进剂实现 8~11 mm/s 燃速要求,克服其燃烧过程中氧化能力相对较弱使得部分在 HTPB 推进剂中对燃烧效率具有提升效果的合金燃料应用效果不理想的问题,研究人员采用真空定容爆热、活性铝含量分析、燃烧高速摄影、熄火表面及残渣分析、端燃 $\phi 75$ mm 发动机试车验证等方法,研究了 Al-Mg、Al-Mg-Mn、Al-B-Eu、Al-Zn、Al-Si 等 7 种合金燃料对这类推进剂燃烧效率的影响。

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