

[1]赵慧,乔小晶,郑秋雨,等.表面修饰镀金属碳纤维对8毫米波干扰研究[J].弹箭与制导学报,2009,6:214.

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Title: Attenuation of Coated metal Carbon Fibers by Surface Modified to Interfere 8 Millimeter Wave

作者: [赵慧](#); [乔小晶](#); [郑秋雨](#); [王伟锋](#)
北京理工大学爆炸科学与技术国家重点实验室, 北京100081

Author(s): [ZHAO Hui](#); [QIAO Xiaojing](#); [ZHENG Qiuyu](#); [WANG Weifeng](#)
State Key Laboratory of Explosion Science and Technology, Beijing Institute of Technology, Beijing 100081, China

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摘要: 为了提高镀金属碳纤维作毫米波干扰剂时的分散性能, 采用在镀液中加入润湿剂和柔顺剂对其表面进行修饰, 结果表明用润湿剂和柔顺剂处理镀金属碳纤维均能改善其分散性, 使衰减时间增加; 采用扫描电子显微镜观察其形貌, 发现表面变光滑; 测试了其对于8mm波的干扰性能, 结果表明采用镀液中加入润湿剂的方法获得的样品效果最佳, 衰减率和衰减时间最大, 单程透射衰减最大可达10.69dB。

Abstract: To increase the disperse capability of the coated metal carbon fibers as interferent to 8 millimeter wave, wetting agent and softener are used to modify the carbon fibers surface. The results showed that the disperse capability of the coated metal carbon fibers can be improved after dealing with wetting agent and softener, and both of the attenuation time is increased. The modified surface was observed by SEM, find the surface is smooth, and the attenuation to 8 mm wave was measured. The best is the samples dealing with wetting agent, the most of whose transmission attenuation one way reached to 10.69dB.

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备注/Memo: 收稿日期: 2009-01-06 作者简介: 赵慧 (1984-), 女, 河北人, 硕士研究生, 研究方向: 功能材料。

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