

# 圓極化槽孔天線之縮小化及增加軸比頻寬之研究

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## 摘要

在本論文中，提出採用共平面波導饋入型式的圓極化槽孔天線縮小化及增加軸比頻寬之天線設計，圓極化天線設計結構是利用共平面波導饋入設計為閃電形，達圓極化操作，而在槽孔中植入L形接地金屬微帶是為了增強圓極化操作頻寬。天線設計原理是使用輻射體微擾與饋入段延伸微擾的設計方式激發出具有振幅相等且相位差90。的兩正交共振模態，達成圓極化操作之槽孔天線設計。此天線整合輻射體微擾結構與饋入段延伸微擾結構的設計方式，能有效增強圓極化操作頻寬，並以特殊共平面波導饋入，將匹配具有圓極化操作頻帶，達成寬頻縮小化的天線設計。

關鍵詞：圓極化，縮小化型式，頻寬，金屬，軸比頻寬

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