

论文

有机无机杂化材料准矩形波导的设计与制备

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摘要:

为了满足制作电光开关的需要,采用有机无机杂化材料设计了一种准矩形的波导结构。理论模拟了这种准矩形结构截面的光场分布情况,并与矩形结构截面的光场分布情况作了对比。分别制作了准矩形结构和矩形结构两段直波导,在近场光斑测试系统上测试它们的近场输出光斑,结果表明实验结果与理论模拟结果符合很好。

关键词: 光电子学与激光技术;有机无机杂化材料;准矩形波导;光场分布 BPM模拟

Design and fabrication of organic inorganic hybrid quasi rectangle waveguide

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Abstract:

A quasi rectangle waveguide structure is designed using organic inorganic hybrid material to meet the needs of the fabrication of electro optic switches. The optical field distribution on the cross section of the quasi rectangle waveguide structure is simulated and compared with that of the rectangle waveguide structure. Then two linear waveguides, the quasi rectangle waveguide structure and rectangle waveguide structure, are fabricated. The output near field profiles of the two linear waveguides are captured respectively on a testing system. Comparison shows that the testing results are in good agreement with the simulation results.

Keywords: optoelectronics and laser organic inorganic hybrid material quasi rectangle waveguide optical field distribution BPM simulation

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