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Title

Design and Analysis of a Low-loss Terahertz Directional Coupler Based on Three-core Photonic Crystal Fibre Configuration

Source

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Abstract

A novel kind of terahertz directional optical fibre coupler is proposed. The coupling characteristics and operation bandwidth of the three-core photonic crystal fibre coupler are investigated. Numerical results show that it is possible to achieve a broadband terahertz fibre coupler with a small fibre length of a few centimetres. In addition, a modified configuration, which can achieve a wider bandwidth and lower absorption loss, is proposed. (24 References).