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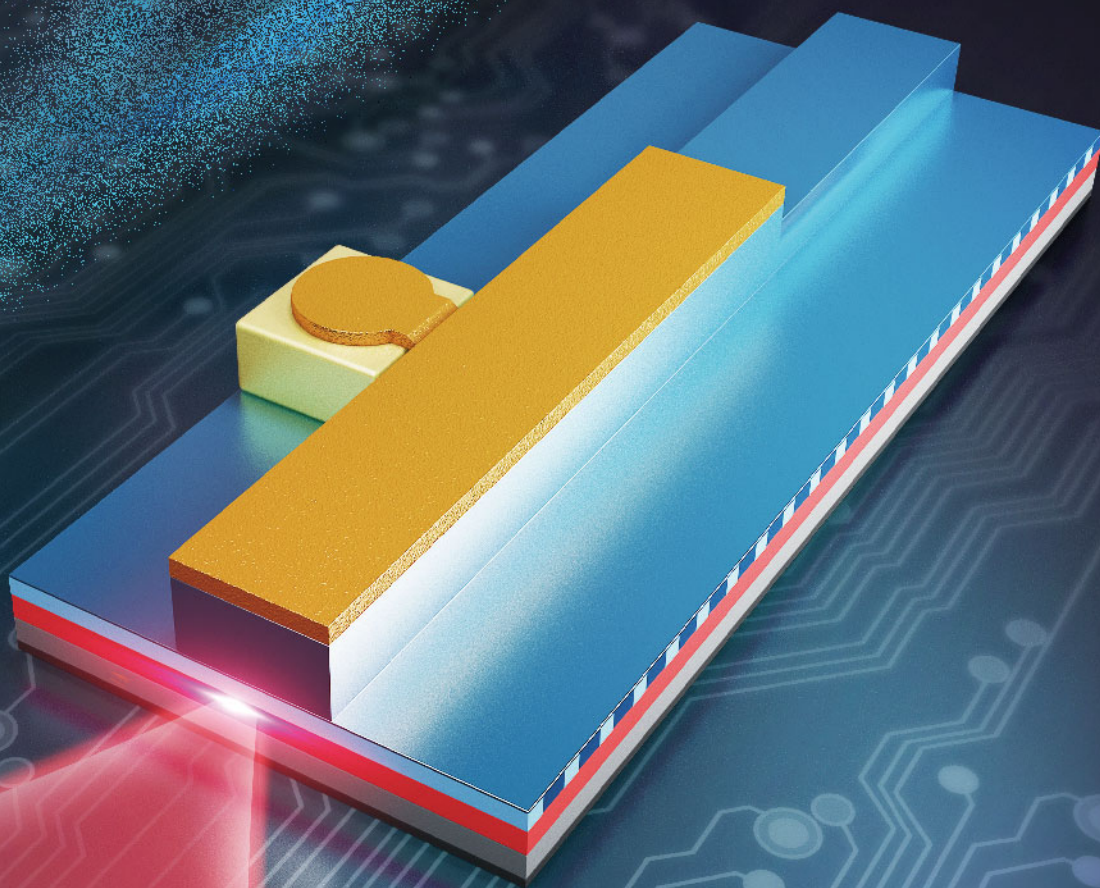
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高速直调激光器

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封 面 解 读

封面展示了高速直接调制分布反馈(DFB)激光器,包括一段有源 DFB 激光器区和一段无源分布布拉格反射(DBR)光反馈区。当激光器的发光波长位于 DBR 反射谱峰值波长的长波区时,所产生的失谐加载效应可以显著提升器件的直接调制带宽。同时,DBR 区的光栅有助于提高输出光功率并减小解理端面相位不确定性的影响,有效提升激光器单模成品率。DFB 区及 DBR 区均采用了相同的量子阱材料,简化了制备工艺,有利于降低器件成本。所制备的器件具有高速率、高可靠性和低成本的优势,在短距离高速光纤通信系统中具有广泛的应用前景。

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