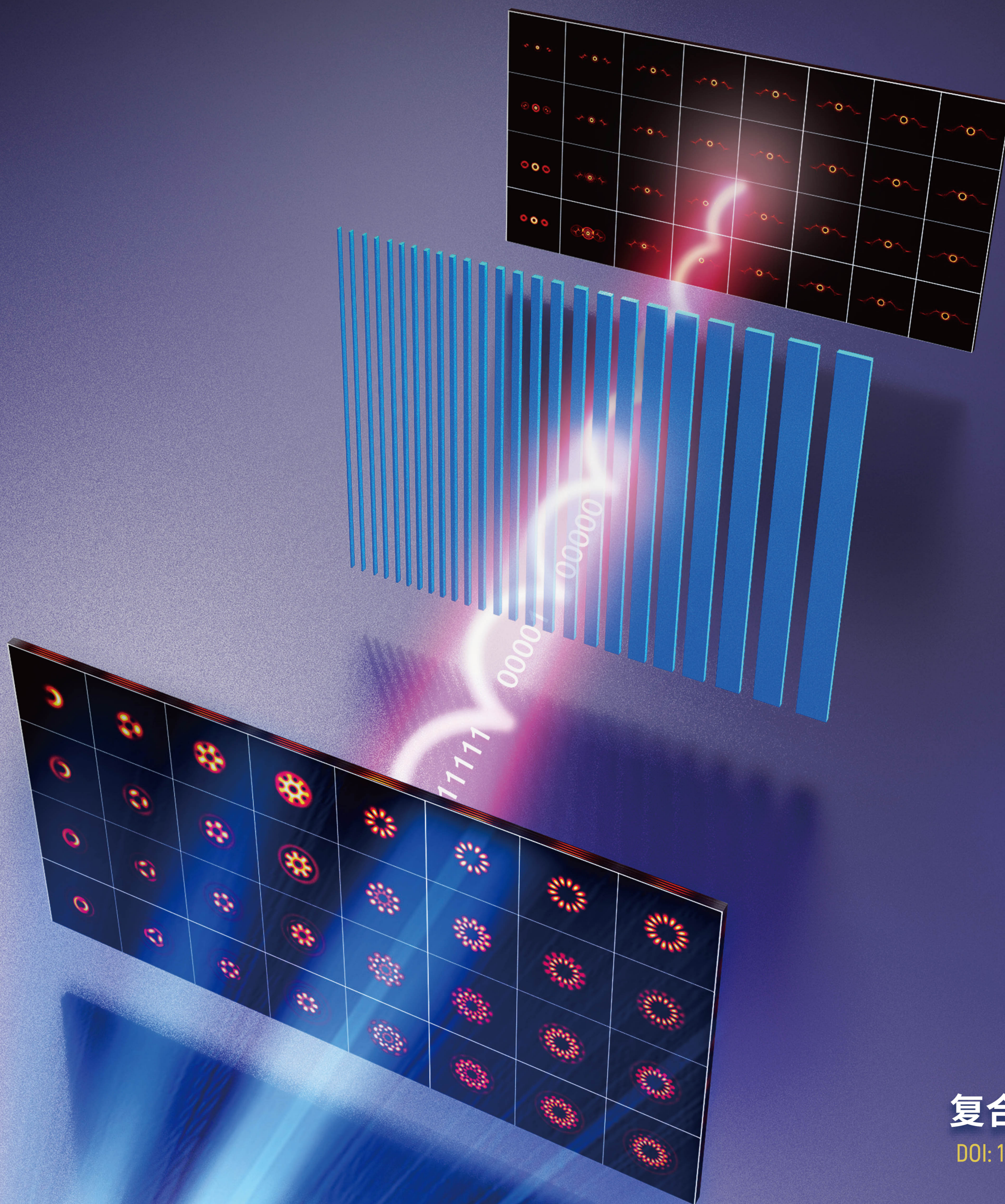


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封 面 解 读

封面形象地展示了由 5 位二进制序列(00000~11111)编码的 32 组复合涡旋光束在自由空间中传输。在发送端,首先将 32 组复合涡旋光束依据提出的映射关系式转换成 32 组单束拉盖尔-高斯(LG)涡旋光束,随后依次照射在 x 或 y 方向的周期渐变光栅上,通过周期渐变光栅的远场衍射光斑图可成功检测出入射 LG 涡旋光束的轨道角动量(OAM)模态和径向模态,从而推导出对应的复合涡旋光束并实现正确解码。

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