

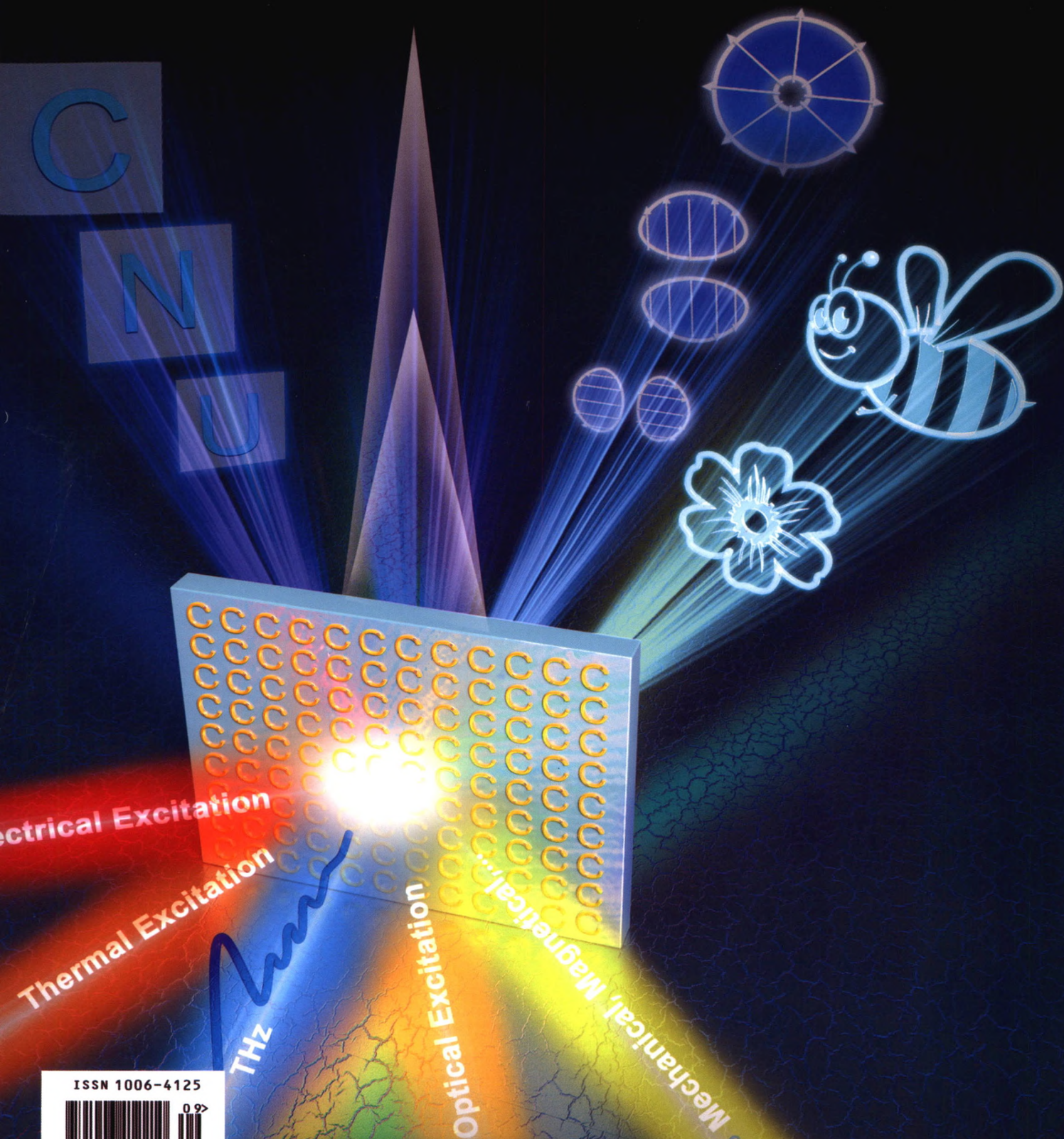
# 激光与光电子学进展

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# 激光与光电子学进展

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封面解读

超构表面,一种对电磁波进行全方位操控的新型人工材料。基于超构表面可实现各种电磁波功能器件,包括透镜,偏振器件,以及字符或图像显示的全息器件等。在此基础上,动态超构表面结合可调新型材料及相应的外激励手段,实现对器件功能的主动调控。半导体材料、相变材料、二维材料、磁性材料、可形变材料以及一些化学材料都是可调的新型材料,将其集成到传统超构表面中,并加以电、热、光、磁、机械拉伸或者化学掺杂的外激励方式,即可实现对器件功能的动态调控。例如,对透镜聚焦范围的调控,对电磁波偏振态的改变及不同字符或者图案成像之间的动态切换。

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