

激光与光电子学进展

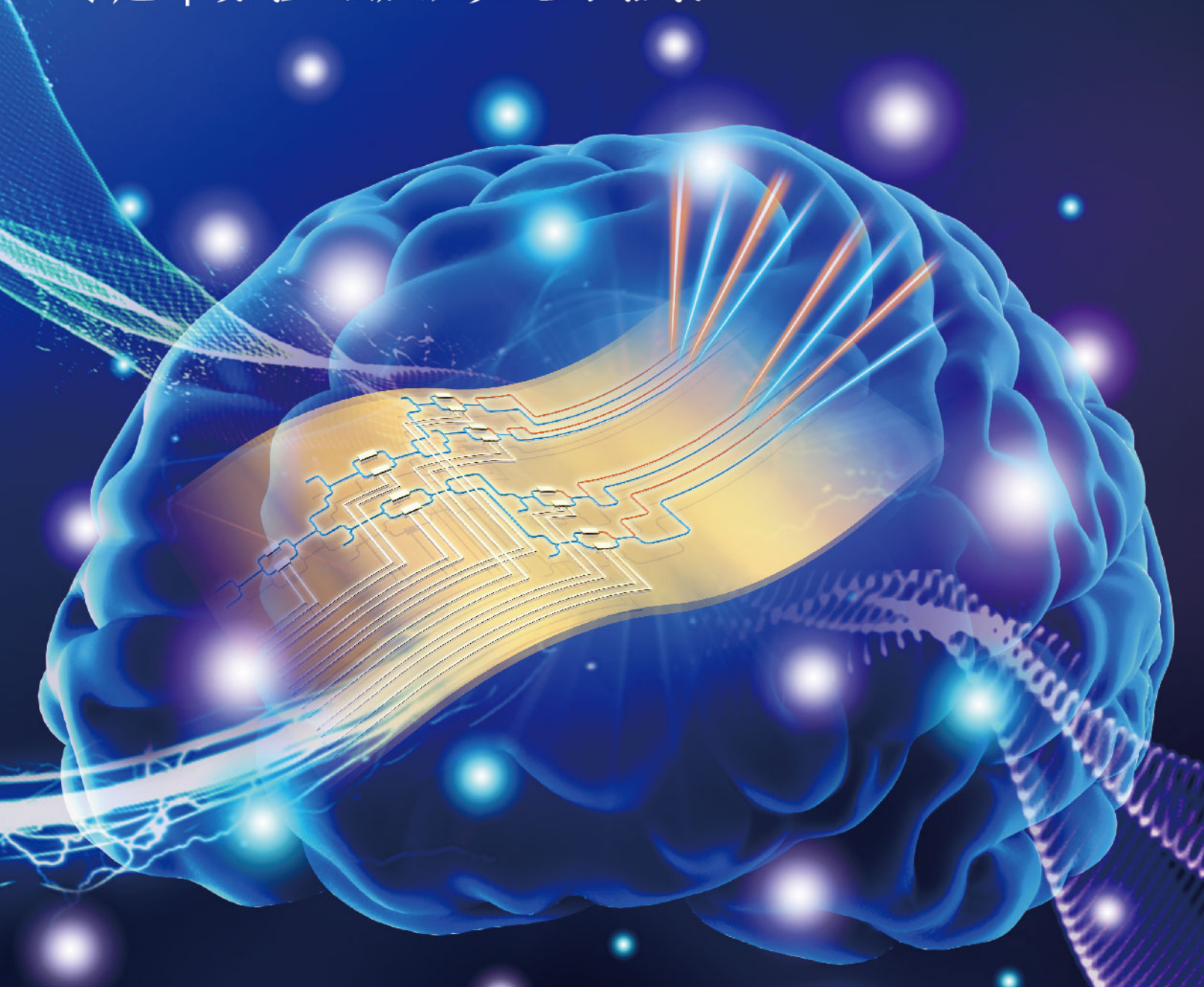
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专题 | 柔性可编织光电子器件



柔性光遗传探针

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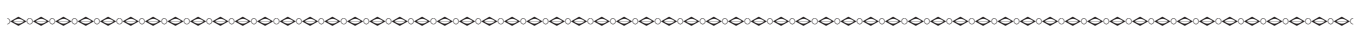
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封面解读

本封面以柔性波导集成型光遗传探针为突出要点。如丝绸一般柔软的器件位于大脑正中央,表明柔性探针和大脑彼此兼容。探针从多个通道射出各色的光,熠熠生辉的大脑则仿佛是这种光照下最好的呼应,象征这种光遗传探针能为人类探索大脑的进程带来新的光明,帮助我们解开更多大脑的谜团。

封底解读

封面从材料、器件及应用三个层面,展示了基于柔性有机聚合物光纤的智能仿生手的应用示例。通过分布式多模态光纤传感技术,构建感知反馈神经网络,让仿生手拥有类似人手的本体感觉和触觉感知功能,继而实现精细、灵活的操作能力。

内封面解读

本封面以柔性多层智能光电织物为突出要点,放在人体的胸腔部位获取专业、精准的呼吸力学数据,表达“轻量化”智能光电技术在纺织服装领域的多元化发展。科技感的发光线条表达高端的光电柔性感知技术可在物联网下,为打造兼具时尚、舒适的个人健康管理服装创新赋能。同时,光电服用织物也符合构建面向未来产业的创新生态总体目标下,对“技术应用场景化”发展的要求。启示研究者将“科学精神与工匠精神”有机融合,在大健康背景下,让光电技术服务国民经济发展和满足人民美好生活。

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