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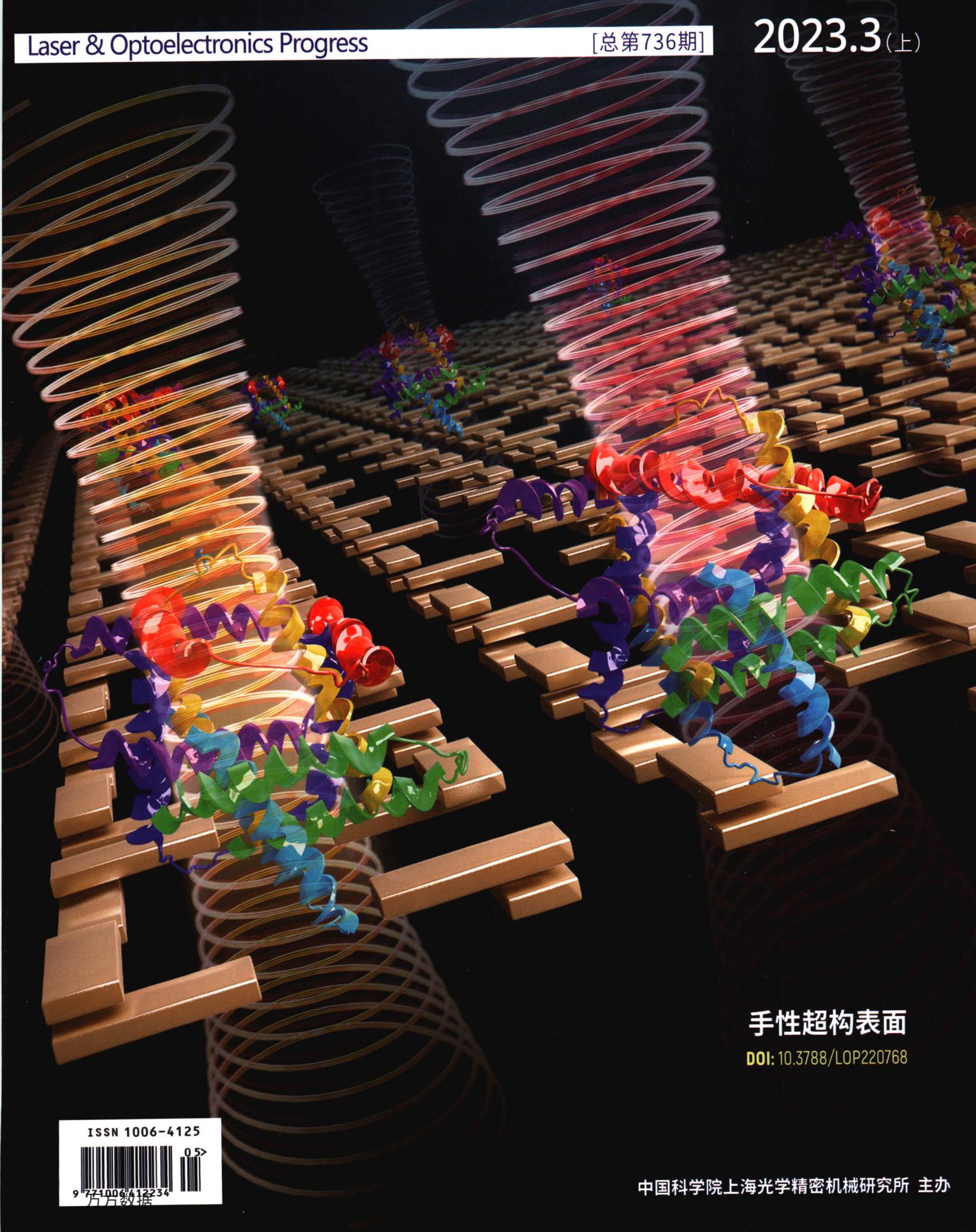
激光与光电子学进展

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手性超构表面

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激光与光电子学进展

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封面解读

手性超构表面是由亚波长尺度单元所组成的平面或准平面光子器件,可实现显著的近场或远场光学手性响应。封面展示了由金纳米棒正交堆叠的C4对称的三维Born-Kuhn类型超构表面(金色所示),可有效增强手性光(类似弹簧的左旋圆偏振光和右旋圆偏振光)与手性分子(由红、黄、蓝、绿、紫等颜色组成)的相互作用,产生显著的圆二色性信号。手性超构表面在手性传感、手性粒子分离等方面有广阔的应用前景。

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特色专题

2022年联合国国际玻璃年 (IYOG2022) | 特刊

59卷第15期 | 2022年8月

2022年被联合国大会定为国际玻璃年,这是单一材料第一次被联合国命名,反映了玻璃在科技、经济、文化和社会诸多领域不可或缺的重要地位。但正如P. Anderson指出的“凝聚态物理领域最深奥的悬而未决的问题可能是玻璃的本质和玻璃化转变”。近年来在国家科技部、教育部和国家基金委的大力支持下,我国玻璃科学与技术研究取得了长足的进展,在部分领域形成了我们自己的鲜明特色,但不少方向与先进国家还存在差距。基于此,《激光与光电子学进展》适时推出了“2022年联合国国际玻璃年(IYOG2022)”特刊。共收录23篇高质量的论文,其中包括22篇特邀论文,邀请了来自清华大学、华南理工大学、哈尔滨工程大学、澳大利亚新南威尔士大学、法国巴黎萨克雷大学、中科院上海光机所、中科院福建物构所等单位的玻璃领域的专家学者撰稿,内容涵盖了玻璃基因工程、增材制造、放电等离子烧结技术、900 nm波段关键激光材料、中红外玻璃光纤光栅制备等玻璃材料在诸多领域的具体应用,代表了光电玻璃领域的研究现状和发展趋势,极具参考价值。

希望本专题内容可以为高性能光电玻璃的开发和产业化应用提供理论指导和应用参考,促进我国玻璃行业的可持续发展。



专题官网



专题微信

特邀组稿专家



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林常规 研究员
宁波大学

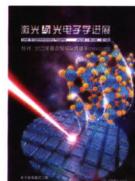
封面文章



封面文章

飞秒激光调控非线性光学晶体和周期性纳米结构取向

作者: 曹晶, MatthieuLancry, FrançoisBrisset, BertrandPoumellec
单位: 清华大学;巴黎萨克雷大学



封底文章

玻璃基因工程在激光玻璃等光功能玻璃领域的研究进展

作者: 董国平,万天泽,吴敏波,潘绮雯,邱建荣,杨中民
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内封面文章

增材制造在特种石英光纤制备中应用的研究进展

作者: 楚玉石,张建中,彭纲定
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