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研究方向 · 集成电路制造
· 计算光刻 (结合机器学习、基因算法)



更新时间: 2022-05-21 | 总访问量: 3730

个人简介

发表论文

主持项目

教学与课程

研究与成果

中国科学院大学博士、博士后。现任浙江大学微纳电子学院特聘研究员。近5年一直致力于相变材料的开发、优化、以及相变机理研究。目前从事55 nm 低功耗CMOS成套工艺开发。迄今,以第一作者或通讯作者在ACS Applied Materials & Interfaces, Nanoscale, Applied Physics Letters, Scripta Materialia, Journal of Alloys and Compounds和Scientific Reports等国际著名学术期刊发表论文近20余篇,申请专利10余项,主持国家自然科学基金1项,浙江省自然科学基金1项,国家重点实验室开放课题1项。



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1. **K. Ren**, M. Xia, S. Zhu, G. Wang, T. Xin, S. Lv, Z. Song, Crystal-Like Glassy Structure in Sc-Doped BiSbTe Ensuring Excellent Speed and Power Efficiency in Phase Change Memory, *ACS Appl. Mater. Interfaces*, 2020, 12, 16601.
2. **K. Ren**, M. Zhu, W. Song, S. Lv, M. Xia, Y. Wang, Y. Lu, Z. Ji, Z. Song, Electrical switching properties and structural characteristics of GeSe-GeTe films, *Nanoscale*, 2019, 11, 1595.
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4. Y. Wang, T. Guo, G. Liu, T. Li, S. Lv, S. Song, Y. Cheng, W. Song, **K. Ren**, Z. Song, Sc-Centered Octahedron Enables High-Speed Phase Change Memory with Improved Data Retention and Reduced Power Consumption, *ACS Appl. Mater. Interfaces*, 2019, 11, 10848. (**Corresponding Author**)
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12. **K. Ren**, R. Li, J. Shen, T. Xin, S. Lv, Z. Ji, Z. Song, Study on the phase change behavior of nitrogen doped Bi₂Te₃ films, *J. Alloys Compd.*, 2018, 754, 227.
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1. Bi_{0.5}Sb_{1.5}Te₃基相变存储器低压低功耗性能优化及相变机理研究 国家自然科学基金青年项目
2. O-Ti-Sb-Te 相变材料以及在突触器件中的应用 浙江省自然科学基金青年项目
3. C粘附层增强相变存储器界面高温稳定性的研究 国家重点实验室开放课题

