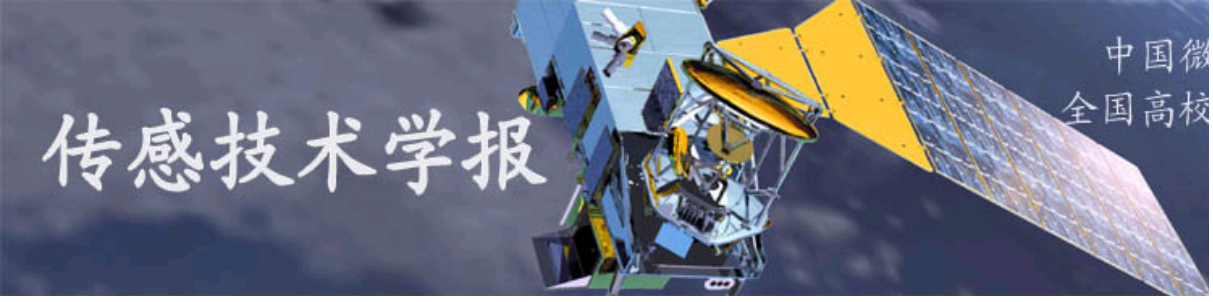

基于La0.9Sr0.1Ga0.8Mg0.2O2.85固体电解质小孔极限电流型氧传感器的研究

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摘　要：

本文制备了以中温固体氧离子导体—La0.9Sr0.1Ga0.8Mg0.2O2.85的流延片为小孔扩散障层和氧泵层材料的小孔极限电流型氧传
点下的氧敏特性进行了测试。从测试的结果中可以看出：在氧浓度为0.1%～3%的范围内出现较好的极限电流平台，而且极限
此外，当温度为650℃时，使氧浓度在0.5%与3%之间来回跳变，测得传感器的响应时间曲线，从曲线图可读出上升和下降响

关键词：La0.9Sr0.1Ga0.8Mg0.2O2.85，小孔扩散障层，氧泵层，氧传感器，极限电流，响应时间

The study of the amperometric oxygen senor with a thin hole based on La0.9Sr0.1Ga0.8M

Author's Name:

Institution:

Abstract:

In this paper, the La0.9Sr0.1Ga0.8Mg0.2O2.85 was used to make the amperometric oxygen senor with a thin hole, which is the solid c
intermediate temperate area. The diffused barrier and the oxygen pump layer are all used the thin film of this material. After that, the
manufactured oxygen sensor was tested at 600℃ and 650℃. At this two temperature points, the tested dates shown that there were
oxygen concentration ranges from 0.1% to 3%,and the limiting current exhibited a linear dependence on oxygen concentration. In ac
650℃ when the oxygen concentration changed between 0.5% and 3% back and forth. From the response curves, it can find that the
15s.

Keywords: La0.9Sr0.1Ga0.8Mg0.2O2.85, the diffused barrier with a thin hole, the oxygen pump layer, the oxygen sensor, limiting cur

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