氧化物鐵電與反鐵電薄膜

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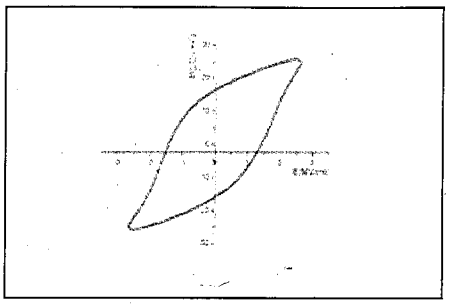
簡　歷：
http://www.mse.ntu.edu.tw/index.php?option=com_zoo&task=item&item_id=47&Itemid=902&lang=tw



市場及需求:

負電容電晶體及非揮發性記憶體之應用

技術摘要(含成果):

調控氧化物的鐵電或反鐵電特性

優勢:

此技術只需要低溫製程，不須任何退火處理即可達成，適合元件製程上的整合

競爭產品:

傳統如 PZT 等鐵電薄膜

專利現況:

相關專利 (美國專利證號: US20170365719A1)。

聯絡方式(請不用填):

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Ferroelectricity and antiferroelectricity in oxide thin films

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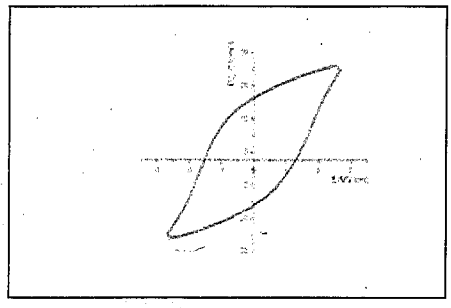

Experience:

http://www.mse.ntu.edu.tw/index.php?option=com_zoo&task=item&item_id=47&Itemid=902&lang=tw

Market Needs:

Ferroelectric thin films with negative capacitance can contribute to significant improvement in MOSFET for ultra-low power computing. Ferroelectric thin films can also be used in nonvolatile memory applications.

Our Technology:

The ferroelectric and antiferroelectric properties in the oxide thin films can be controlled and modified.

Strength:

This technique is a low-temperature process without the need of post-deposition annealing; hence, it is beneficial to device integration.

Competing Products:

Conventional PZT ferroelectric thin films

Intellectual Properties:

American patent: US20170365719A1

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