凝聚态物理-北京大学论坛

2011年第7期

Effect of the polarity on wurtzite nitride and oxide materials grown by MOVPE and their new application

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Abstract: III-V nitride and ZnO have been well known as a wider band gap material, and have been intensively applied to light emitting devices and electron device. Since the materials have the wurtzite crystal structure with the polarity along c-axis, the polar structure on the surface would give an influence to the film growth [1]. In this presentation, the effect of polarity on the film growth will be presented and their new applications of photocathode and solar cell will be introduced.

[1] M. Sumiya et al., MRS internet J. Nitride Semicon. Res. Vol. 9, 1-32 (2004)

URL:
http://www.nims.go.jp/optical_sensor/sumiya_lab/

Masatomo Sumiya: (Dec. 11th, 1966)

March 1995 Ph. D of Engineering from Tokyo Inst. of Tech

Amorphous silicon thin film with lower defect density for the solar cell application

1995- 1996 Pos-doc @ Colorado State Univ. in USA

1997 2006 Research associate @ Shizuoka Univ.

Research of polarity in III-V nitride grown by MOVPE

2006-now: Principle Researcher @ National Institute for Materials Science ZnO film growth by MOVPE

Development of and photocathode and solar cell using III-V nitride films

Sahara Solar Breeder plan

时间：4月14日（星期四）15:00－16:40

地点：北京大学理科5号楼（老法学楼）607会议室

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