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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: (Dedicated to the memory of Masatomo Sumiya, 1966-1995)
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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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Photograph by Xiaodong Hu