

Abstract Submitted  
for the GEC13 Meeting of  
The American Physical Society

**Polymerizable Supramolecular Sensor for Plasma Diagnostics on Wafer Level** HYO-CHANG LEE, Department of Electrical Engineering, Hanyang University, Seoul 133-791, Korea, SEONG-HO JEON, JONG-MAN KIM, Department of Chemical Engineering, Hanyang University, Seoul 133-791, Korea., CHIN-WOOK CHUNG, Department of Electrical Engineering, Hanyang University, Seoul 133-791, Korea — Low temperature reactive plasma allows fabrication of high quality nano-device owing to the synergy effect of the plasma, especially ions impinging on the wafer. We have developed a large area wafer-type plasma diagnostic system based on the polymerizable supramolecular sensor (PSS) that affords colorimetric and fluorometric monitoring of spatial ion density distribution. The PSS system does not require electric circuits or batteries and is found to be very sensitive to the plasma and allows efficient mapping of the ion density distribution. The readily available and conceptually new method should find great utility in the field of plasma diagnostics.

Hyo-Chang Lee  
Department of Electrical Engineering,  
Hanyang University, Seoul 133-791, Korea

Date submitted: 14 Jun 2013

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