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Poster Presentation

## [FMCp5]Materials &Components

Thu. Nov 28, 2019 2:30 PM - 5:00 PM Main Hall (1F)

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2:30 PM - 5:00 PM

### [FMCp5-8L]Capacitance-Voltage Characteristics of Solution-Based HfZr-Silicate Gate Dielectrics

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Keywords:HfZr-Silicate, High-k dielectrics, MOS, Solution process

In this study,  $\text{Al}/(\text{HfZrO}_4)_{1-x}(\text{SiO}_2)_x/\text{p-Si}$  capacitors were fabricated and evaluated as a function of  $\text{SiO}_2$  content in the films. From the result, electrical properties enhanced such as oxide charge and breakdown voltage as the  $\text{SiO}_2$  concentration  $x$  increased and reliability improved as well.