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임베디드 박막 캐패시터용 유전막의 플라즈마 처리 효과에 대한 연구 A Study on the Effect of Plasma Treatment on Dielectric Layer for the Application of Embedded Thin Film Capacitor

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In this study, we examined the effect of plasma treatment on dielectric layer for the application of embedded thin film capacitor in various experimental conditions. To alter the morphological, physical and electrical characteristics of dielectric layer, we prepared amorphous dielectric layer via sol-gel process and applied carefully designed experimental conditions, types of plasma source, power, time for treatment, gas, types of dielectric material, and drying condition of layer, etc. The effects of treatment were confirmed via X-ray diffraction method, scanning electron micrograph, and the measurement of electrical properties.