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Poster Presentation

## [FMCp2]Quantum Dot Technologies

Special Topics of Interest on Quantum Dot Technologies

Thu. Nov 28, 2019 10:40 AM - 1:10 PM Main Hall (1F)

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10:40 AM - 1:10 PM

### [FMCp2-1]Wide Color Gamut White Light-Emitting Diode using Quantum Dot/Siloxane Hybrid Encapsulation Material with Excellent Environmental Stability

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Keywords:Quantum dot, Siloxane hybrid, Stability, Encapsulation, White light-emitting diode

We report a luminescent light-emitting diode (LED) encapsulation material using quantum dot (QD)/siloxane hybrid (TSE-QD). The TSE-QD shows exceptional stability under high temperature (120 °C in ambient) and various chemicals. TSE-QD based white LED also exhibits superior reliability under high temperature/high humidity and wide color gamut (116 % of NTSC).