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Poster Presentation

## [OLEDp2]OLED/QDT poster

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

## [OLEDp2-7L]Mechanisms of operation in quantum-dot light-emitting diodes

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Keywords:Quantum dots, Quantum-dot light-emitting diodes (QLED)

Mechanisms of operation in quantum-dot light-emitting diodes (QLEDs) have been investigated theoretically and experimentally. Important factors governing the current efficiency of QLED were examined using a machine learning approach. High hole injection barrier to QD is the dominant efficiency limiting factor, and the machine learning result was confirmed experimentally. A mechanism of high current efficiency even in the presence of high hole injection was discussed in terms of device simulation