

Wed. Nov 27, 2019

Conference Hall

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Invited Addresses

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Chair: Munehiro Kimura (Program Chair, IDW '19)

Co-Chair: Shinichi Komura (General Chair, IDW '19)

11:00 AM - 12:20 PM Conference Hall (1F)

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[InvitedAddress-1] Monolithic Micro-LED Full-Color

Micro-Displays

\*Kei May Lau<sup>1</sup> (1. Hong Kong Univ. of  
S&T (Hong Kong))

11:00 AM - 11:40 AM

[InvitedAddress-2] Artificial Intelligence: from  
Pixels and Phonemes to Semantic  
Understanding and Interactions

\*Achin Bhowmik<sup>1</sup> (1. Starkey Hearing  
Techs. (United States of America))

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## [InvitedAddress-1] Monolithic Micro-LED Full-Color Micro-Displays

\*Kei May Lau<sup>1</sup> (1. Hong Kong Univ. of S&T (Hong Kong))

Monolithic LED arrays with color conversion schemes for full-color displays will be reported. Two micro-LED arrays fabricated using blue and dual wavelength LED epilayers are extended to full-color by quantum-dot down conversion technology. Both approaches exhibit feasible manufacturability and decent visual quality, showing promise toward volume production of full-color micro-displays.

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11:40 AM - 12:20 PM (Wed. Nov 27, 2019 11:00 AM - 12:20 PM Conference Hall)

## [InvitedAddress-2] Artificial Intelligence: from Pixels and Phonemes to Semantic Understanding and Interactions

\*Achin Bhowmik<sup>1</sup> (1. Starkey Hearing Techs. (United States of America))

In the recent years, unprecedented advances in artificial intelligence (AI) technologies and applications are being enabled by rapid developments in machine learning, big data, and specialized computing architectures. We will review how devices are increasingly being endowed with technologies to sense and understand the world, often surpassing human-level performances, and ushering in a new wave of intelligent applications.