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Jianzhong Jiao
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Introduction

These proceedings are focused on the LED-based illuminating systems.

LED die and package technologies have been quickly evolving and improving in the past several years. Sufficient luminous flux, high efficacy, and long durability of the LEDs led to rapid implementation of LED-based illuminating systems or solid-state lighting (SSL). Not only does the SSL bring in the energy saving benefit, the potentials of lighting performance quality has also been demonstrated.

The technical challenges in the implementation of SSL may be presented in the areas of lighting system configuration, optical design, thermal management, electronics and controls, reliability, and testing methods. Studies and research have been carried in both industry and academia. These research results indicate a trend for wider applications of LED-based illuminating systems.

In addition, standardization of SSL has also made progress. Both LED package level and LED illuminating system level standards have been established for chromaticity, lumen maintenance, and safety.

These proceedings will demonstrate accomplishments and status of SSL technologies.

Jianzhong Jiao