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Light-Emitting Diodes (LEDs)

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Message from the Guest Editors

Lighting systems based on LED technologies gain further significance as they are reaching maturity. However, a series of challenges remain unsolved. Complex LED driver designs still show limited efficiency. On the other hand, some economical choices in the design of the power electronic systems required to drive LED result in units whose longevity is shorter than those of LED devices. Accordingly, the development of efficient and reliable LED drivers is an interesting research topic.

This Special Issue focuses on the discussion of emerging solutions suitable to leverage the efficiency and sustainability of LED lighting systems. Possible topics include, but are not limited to,

- Fault-tolerant and sustainable LED driver configuration.
- Optimized control strategies for LED drivers, including demand-side management.
- Reliability prediction and physics of failure of LED devices.
- Temperature management in LED systems.
- Smart controllers based upon human presence detection.

Specialsue



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