



Call for Papers

IEEE Journal of Emerging and Selected Topics in Power Electronics

Special Issue on Emerging Topics in Lighting, 2018

Scheduled Publication Time: September 2018

The drive for more efficient and smarter ways to use electrical energy is increasingly more prevalent. Lighting, as the most common and naturally the most constant form of load, constitutes a significant portion of the total electricity consumption in all buildings. Therefore, it has a high energy-saving potential to optimize the lighting system, including both the lighting sources and their supply, towards better efficiency.

Currently, the LED lamps are replacing the traditional incandescent lamps due to their advantages in efficiency, life span and fast response. With the development of LED packing and coating technology, the cost of the LEDs will be further decreased and they will be more widely used in different applications. Besides, Discharge lamps, like fluorescent lamps, metal halide lamps and sodium vapor lamps are still being used in many applications owing to their several advantages. Both the LEDs and the discharge lamps require a current-regulating driving circuit, which is a critical factor influencing the efficiency of the lighting system and still calls for improvements.

Additionally, various lighting control schemes at both the user level and the vendor level are being developed concerning the energy saving. In this environment, this special session is devoted to the latest advances on industrial electronics applied to the optimization of lighting systems. Topics of interest include, but are not limited to:

The main objective of this Special Issue is to collect the latest developments in lighting technologies. Prospective authors are invited to submit original contributions or survey papers for review for publication in this special issue. Topics of interest include but are not limited to:

- Power Converters for LEDs, OLEDs and Plasma Display Panels
- Electronic Ballasts for Fluorescent, HID and Electrodeless Lamps
- Distributed/Centralized Control Applied to Lighting Systems
- Modeling of Lighting Loads and Drivers
- Digital Control for Lighting Systems
- Electronic Ballasts for Xenon Lamps in Automotive Applications
- Dimming Control in Lighting Systems
- EMI/EMC Issues in Lighting Systems
- Energy-saving and Environmental-Friendly Issues in Lighting Fixtures
- Future Trend of Power Electronics in Lighting Applications

All manuscripts must be submitted through Manuscript Central at <http://mc.manuscriptcentral.com/jestpe-ieee>. Submissions must be clearly marked "Special Issue on Emerging Topics in Lighting, 2017" on the cover page. When uploading your paper, please select your manuscript type "Special Issue." Refer to <http://www.pels.org> for general information about electronic submission through Manuscript Central. Manuscripts submitted for the special issue will be reviewed separately and will be handled by the guest editorial board noted below.

Deadline for Submission of Manuscript: December 31, 2017

Guest Editors: Don Tan, Northrop Grumman Aerospace Systems, USA (dong.tan@ieee.org)
Dianguo Xu, Harbin Institute of Technology (HIT), China (xudiang@hit.edu.cn)

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Proposed Timeline:

- September, 2017 – Call for Papers to IEEE JESTPE Editorial Office
- December 31, 2017 – Manuscripts Submission Deadline
- May 20, 2018 – Final Acceptance Notification
- June 1, 2018 – Manuscripts Forwarded to IEEE for Publication
- September 1, 2018 – Special Issue Appears in IEEE JESTPE