



August 20, 2020 | Issue 4

Have you read the 2019 Prize Paper winners?

Our 2019 TPEL, TPEL Letters, and JESTPE Prize Paper winners will be posting any day! Check PEELS' Awards page to learn who this year's winners are!

Did you know this year *IEEE Transactions on Power Electronics* is presenting more awards than ever? With the ever increasing numbers in their submissions--and publications--TPEL will no longer limit their awards to eight regular papers and one letter. You'll want to keep a close eye on their winners each year!

<https://www.ieee-pels.org/awards>

IEEE Transactions on Power Electronics (TPEL)

The September 2020 issue we published 82 new papers, including four Reliability papers and ten papers on Wireless Power Transfer!

<https://ieeexplore.ieee.org/xpl/tocresult.jsp?isnumber=9088165&punumber=63>

September Highlighted Papers:

[Single-Phase Bridgeless PFC Topology Derivation and Performance Benchmarking](#)

Zhengge Cheng; Pooya Davari; Huai Wang

Reviewing, categorizing, and synthesizing single phase PFC topologies.

[Extended Functionalities of Photovoltaic Systems With Flexible Power Point Tracking: Recent Advances](#)

Hossein Dehghani Tafti; Georgios Konstantinou; Christopher D. Townsend; Glen G. Farivar; Ariya Sangwongwanich; Yongheng Yang; Josep Pou; Frede Blaabjerg

A good overview of the recent advances on photovoltaic flexible power point tracking.

Active Content Paper

The September 2020 issue includes papers with active content. Check out the supplemental file, which is a part of capacitor database for model-based multi-objective optimization of capacitor banks, that go along with:

[Model-Based Design and Optimization of Hybrid DC-Link Capacitor Banks](#)

Haoran Wang; Cunzhong Li; Guorong Zhu; Yang Liu; Huai Wang

IEEE Transactions on Power Electronics Letters

TPEL letter continues its strong growth. In the September 2020 issue, 8 interesting TPEL Letters are published with the titles listed below. Please enjoy reading those short articles:

[Analysis and Optimization of Current Dynamic Control in Induction Motor Field-Weakening](#)

Region

Xu Zhang; Bo Wang; Yong Yu; Jing Zhang; Jiixin Dong; Dianguo Xu

Three-Terminal Si/SiC Hybrid Switch

Xiaoqing Song; Liqi Zhang; Alex Q. Huang

A Magnetically Controlled Single-Stage AC–DC Converter

Yuqi Wei; Quanming Luo; J. Marcos Alonso; Alan Mantooth

Reference-Feedforward Power-Synchronization Control

Lennart Harnefors; F. M. Mahafugur Rahman; Marko Hinkkanen; Mikko Routimo

Series-Connected Current-Source Inverters: f_{SW} = 60 Hz

Ling Xing; Qiang Wei

An Adaptive Dual-Loop Lyapunov-Based Control Scheme for a Single-Phase UPS Inverter

Jinsong He; Chan Chok You; Xin Zhang; Zhan Li; Zhangjie Liu

High-Frequency Oscillation Mechanism Analysis and Suppression Method of VSC-HVDC

Jianhang Zhu; Jiabing Hu; Lei Lin; Yifan Wang; Chao Wei

Practical Design Methodology of IH and IPT Dual-Functional Apparatus

Mina Kim; Hwa-Pyeong Park; Jee-Hoon Jung

IEEE Power Electronics Magazine

Over the decades, New York-based materials giant Indium Corporation has expanded its global presence. As a result, today the company is a major materials supplier in areas as diverse as automotive, medical, mobile, aerospace electronics, renewable energy; large displays, solid-state lighting and more. Now the materials giant is igniting an electronics materials renaissance in Upstate New York. Learn more about this revival by reading the company profile written by Indium Corp's senior product manager Andy Mackie in the June 2020 issue of *IEEE Power Electronics Magazine*.

<https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=9119017>

IEEE Open Journal of Power Electronics (OJ-PEL)

The *IEEE Open Journal of Power Electronics* has continued to publish a number of papers each month and has already surpassed its original goal for the first year. Watch for upcoming papers from luminaries in the power electronics field including Johann Kolar, Philip Krein, and Frede Blaabjerg. The journal's rapid submission-to-first decision time of 21 days is being lauded as the model for open journals within the IEEE portfolio!

<https://ieeexplore.ieee.org/xpl/mostRecentIssue.jsp?punumber=8782709>

Submit a paper and your paper could be posted too! To learn more: <https://www.ieee-pels.org/publications/ieee-open-journal-of-power-electronics>

IEEE Transactions on Transportation Electrification

IEEE Transactions on Transportation Electrification is focused on components, sub-systems, systems, standards, and grid interface technologies related to power and energy conversion, propulsion, and actuation for all types of electrified transportation systems. The journal welcomes original and unpublished articles or papers presented at IEEE conferences sponsored by any of our sponsoring IEEE societies (PELS, IAS, PES, VTS, IES, and RS). **In addition to high quality and fast reviews, TTE's 2019 Impact Factor was an impressive 5.44 and the Five-Year Impact Factor was 6.28.**

For further information and paper submission details and Special Issues, please refer to our

website at <https://www.ieee-pels.org/publications/ieee-transactions-on-transportation-electrification>.

Volunteers Needed: Digital Education Initiatives

IEEE Power Electronics Society (PELS) has several major initiatives to expand our web-based education material and provide more PELS membership benefits. A few of the larger, new activities include:

1. Creating a library of short video tutorials on various topics of PELS interest
2. Developing web-based power electronics courses and modules of longer length
3. Cataloging and describing existing web based power electronic education material

It should be enjoyable and have high impact to our PELS. If interested, please fill out the survey/sign-up sheet: [1-minute survey](#).

Did you miss our past Newsletters?

We are posting all PELS Products Newsletter's on the PELS Products' Page. Check them out!
<https://www.ieee-pels.org/publications/products>

IEEE Power Electronics Society |
<https://www.ieee-pels.org/publications>

