



July 09, 2020 | Issue 3

With the surge in online and hybrid conferences this year we are all embracing new formats for sharing our research. Have you perfected your zoom presentations? Created videos of your talks for your conference papers? Take these skills and submit your next paper with a [Graphic Abstract!](#)

Graphic Abstracts can be viewed by anyone and attract more readers to your paper and your work! We're all stuck inside, so let's take this time to give your next submission extra punch!

Find more information on PELS Journals and their submission guidelines: <https://www.ieee-pels.org/publications>.

Breaking News: TPEL Ranked Top Power Engineering Journal!

Congratulations to the IEEE Transactions on Power Electronics! Google Scholar has ranked it as the #1 publication in Power Engineering according to its h-5 index. (The h5-index is the largest number h such that h articles published in 2015-2019 have at least h citations each.)

https://scholar.google.com/citations?view_op=top_venues&hl=en&vq=eng_powerengineering

IEEE Transactions on Power Electronics (TPEL)

The August 2020 issue we published 91 new papers, including six Reliability papers and seven papers on Wireless Power Transfer!

<https://ieeexplore.ieee.org/xpl/tocresult.jsp?isnumber=9076771&punumber=63>

August Highlighted Papers:

[Analysis and Comparison of the Radiated Electromagnetic Interference Generated by Power Converters with Si MOSFETs and GaN HEMTs](#)

Yingjie Zhang; Shuo Wang; Yongbin Chu

The effects of the parameters of GaN HEMTs and Si MOSFETs and the load conditions on the radiated electromagnetic interference (EMI) are analyzed and compared.

[High-Efficiency Hybrid LLC Resonant Converter for On-board Chargers of Plug-in Electric Vehicles](#)

Le Anh Dao Ta; Ngoc Dat Dao; Dong-Choon Lee

A wide-range high efficiency hybrid LLC resonant converter without additional switches.

IEEE Transactions on Power Electronics Letters

TPEL Letters are concise articles that focus on new ideas and fundamental concepts related to the emerging development in power electronics. Seven letters are published in the August 2020 issue of TPEL. Those include 4 articles on the newest developments in DC-DC converter technologies, two articles on wireless power transfer, and one on grid interfacing converter control. Please enjoy reading those short Letters here:

<https://ieeexplore.ieee.org/xpl/tocresult.jsp?isnumber=9076771>

IEEE Power Electronics Magazine

[Emerging Opportunities in Distributed Power Electronics and Battery Integration](#)

Prof. Issa Batarseh and Khalil Alluhaybi, University of Central Florida, Orlando

Shows substantial improvement in battery technology. Mitigation in cost with even greater increases in performance, efficiency, and reliability are paving the way for a new electric energy storage revolution and promising to disrupt the current methods for generating, distributing, and consuming energy. In the same manner refrigeration disrupted the world's production, distribution, and consumption of food! Read the article in full to find out how novel battery storage systems and integration methods are vowing to trigger a significant paradigm shift in power electronics technology, broadly expanding its application reach.

IEEE Open Journal of Power Electronics (OJ-PEL)

Since its launch at the beginning of 2020, *IEEE Open Journal of Power Electronics* (OJPEL) has already published 20 manuscripts!

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

Have you read two of our popular articles?

[An Overview on the Reliability of Modern Power Electronic Based Power Systems](#)

[Saeed Peyghami](#); [Peter Palensky](#); [Frede Blaabjerg](#)

[Design Oriented Analysis of Switched Capacitor DC-DC Converters](#)

[Timothy McRae](#); [Aleksandar Prodić](#)

Super-Fast Publication: Submission to *final decision* (after all author revisions) is only about 4 weeks, making it one of the fastest review cycles in any electrical engineering journal.

Practical Oriented Papers: Submissions of tutorial papers and solutions to real world industrial design issues are also encouraged. Topics such as test and measurement, design automation, semiconductor devices and modeling, artificial intelligence and cybersecurity are of interest, along with the more traditional topics of power conversion.

To learn more: <https://www.ieee-pels.org/publications/ieee-open-journal-of-power-electronics>

IEEE Transactions on Transportation Electrification

Have you read the June 2020 issue?

<https://ieeexplore.ieee.org/xpl/mostRecentIssue.jsp?punumber=6687316>

Featuring 43 papers of the latest research in components, sub-systems, systems, standards, and grid interface technologies related to power and energy conversion, propulsion, and actuation for all types of electrified vehicles including on-road, off-road, off-highway, and rail vehicles, airplanes, and ships.

Coming Soon

Special Issue on More Electric Aircraft

Expected December 2020

Guest Editors: Dr. Carlo Cecati, Dr. Shoujun Song, and Dr. Giampaolo Buticchi

Special Issue on Failure Analysis and Prevention in Transportation Applications

Expected March 2021

Guest Editors: Dr. Annette Muetze and Dr. Elias Strangas

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>

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

