

Pubs Education: CVD Accessible Line Graphs

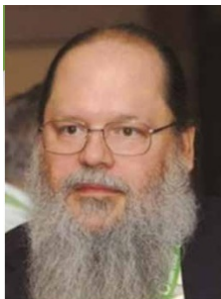
Approximately 1 in 12 men and 1 in 200 women have color vision deficiency. It is highly likely that someone reading your article may have difficulty distinguishing between red and green, blue and green, or yellow and red. The following tips will help you communicate better with those readers.

- Use both color and shape to convey the same meaning; for example, solid and dashed lines or different fill patterns can help readers understand the figure without relying solely on color.
- Each line of your line graph should be a thick line with a unique data point symbol. Contrast different elements of the figure with both color and brightness.
- Connect the data label to the data line rather than relying on a color key.

A quick way to evaluate your figure is to print it out in greyscale and see if it can still be interpreted correctly; if not, use some of these tips to more effectively communicate with all readers.

These tips were featured in the Authors@IEEE Newsletter, Volume 9, Issue 2, March 2024. To subscribe to the newsletter, visit <https://engage.ieee.org/Author-Center-Authors-Newsletter-Opt-in.html>.

IEEE Power Electronics Magazine



Reading recent conference papers, journal articles, and the trade press news, one would think that power electronics comprises only dual active bridge (DAB) converters, various types of multi-level converters, and modular multi-level converters (MMC). But, in reality, the flyback converter has been widely used in high volume products for decades, even before the modern era of solid-state power electronics. Flyback is often discounted for being inefficient, but advances in recent years have made significant improvements. Thanks to GaN switches, losses have been reduced, efficiency has improved, and power density has increased. To learn more, read the **White Hot** column of the March

2024 issue of *IEEE Power Electronics Magazine*. In this column, Bob White provides the proof of that pudding, as well as wonders how much more the flyback can be improved. He still sees room for improvement. Every time he thinks that power electronics technology has reached a limit, he gets surprised and proven wrong.

Free for All

For more editorial from the March 2024 issue of *IEEE Power Electronics Magazine*, visit the [website](#). You will discover a variety of Open Access columns, along with Society News stories. Stay tuned for the September 2024 issue, which will be dedicated to the magazine's tenth anniversary.

IEEE Transactions on Power Electronics (TPEL)

The TPEL editorial team has selected a few papers to highlight from the **May 2024** issue.

“A 48 V-1 V Auxiliary-Assisted Hybrid DC–DC Converter With Flying-Capacitor-Based Virtual Bus for Fast Transient Response” by Nameer Khan, Orest Cobani, Gerard Villar Piqué, John Pigott, Henk Jan Bergveld, and Olivier Trescases. The

focus of this work is an auxiliary-assisted 4:1 dual-inductor hybrid (DIH) converter for fast transient response in 48 V PoL applications.

“**Current-Synchronization Control of Grid-Forming Converters for Fault Current Limiting and Enhanced Synchronization Stability**” by Shan Jiang, Ye Zhu, Tianyi Xu, and Georgios Konstantinou. This article proposes a current-limiting GFM control that is capable of limiting fault current and maintaining grid synchronization during severe faults.

IEEE Power Electronics Letters

Call for Letters Special Section Proposals (Deadline May 31, 2024)

TPEL Letters is seeking proposals for special sections to be published in 2025. The special sections aim for new concepts and fast publications in the form of short letters. If you would like to submit a proposal, please contact the **TPEL Administrator**.

Highlighted Letters from TPEL May 2024

The **May 2024** issue of TPEL presents 16 Letters, covering a wide range of topics in power electronics, such as reliability of SiC MOSFETs, overcurrent protection IC, EMI, motor drives, PCB inductor, dynamics analysis, control, and modulation methods of power converters, and solid-state transformer. Two intriguing letters from this issue are highlighted below.

“**A Fast Overcurrent Protection IC for SiC MOSFET Based on Current Detection**” by Qiang Li, Yuan Yang, Yang Wen, Xue Tian, Yalan Li, and Wei Xiang. This work presents an integrated circuit (IC) for fast overcurrent protection of silicon carbide (SiC) MOSFET. The protection IC is experimentally validated for overloading and short-circuit protections of SiC MOSFETs.

“**A Hybrid-Excited Resolver for High-Speed Operation**” by Jiayue Zhou, Zhe Song, Xi Xiao, Xuanrui Huang, and Yulong Xie. This work presents a robust hybrid resolver for high-speed machine control systems. It adopts a hybrid excitation scheme that employs high-frequency voltage excitation at low speeds and adjustable direct current excitation at high speeds. Experimental results validate the effectiveness of the method at 25 krpm.

IEEE Transactions on Transportation Electrification (TTE)

The editorial team of TTE invites you to read the **March 2024** issue. Volume 10, Issue 1, features 182 papers. Authors are encouraged to submit their manuscripts for publication in TTE. All manuscripts can be submitted through **ScholarOne**. For author guidelines, please visit TTE on the **web**.

IEEE Open Journal of Power Electronics (OJPEL)

OJPEL welcomes the following new Associate Editors to the editorial board.

Nitin Agarwal	Gregory Kish	Deepak Ronanki
Peng Fang	Chushan Li	Yam Siwakoti
Ignacio Galiano	Yicheng Liao	Hani Vahedi
Lei Gu	Hongjian Lin	Cheng Wang
Luis Herrera	Edris Pouresmaeil	Yongchang Zhang

Marco Jung	Lin Qiu	Hang Zhao
Santanu Kapat	Marium Rasheed	Hongbo Zhao

For the latest OA articles, visit the journal on **Xplore**.

IEEE Journal of Emerging and Selected Topics in Power Electronics (JESTPE)

JESTPE welcomes the following new Associate Editors to the editorial board.

Ricardo Aguilera	Nik Ruzmi Nik Idris	Oliver Trescases
Neha Beniwal	Petros Karamanakos	Mengqi Wang
Ching-Jan Chen	Shafiuzzaman Khadem	Hongfei Wu
Wu Chen	Chunyan Lai	Fei Yang
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Jingyang Fang	Zian Qin	Zhe Zhang
Saeed Golestan	Giacomo Scelba	Yue Zhao
Emre Gurpinar	Gab-Su Seo	

Also note the deadline has been extended to May 31, 2024 for the Special Issue on Digital Twin Driven High-Reliability Power Electronic Systems. For more information, visit the Open Calls section **online**.

CORRECTION

In the April 2024 Products Newsletter, the highlighted paper “**An Energy-Based Model of Four-Switch Buck–Boost Converters**” by Ezio Gallo, Davide Biadene, Filip Cvejić, Giorgio Spiazzi, and Tommaso Caldognetto featured the wrong description. The paper actually proposes an energy-based modeling of the four-switch buck-boost (FSBB) converter. Notably, the approach allows to model the dynamics related to the phase shift, in addition to those related to the duty-cycles, of the FSBB. We regret this error.





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