



# ***IEEE Journal of Emerging and Selected Topics in Power Electronics***

## **History of Special Issues**

**Sponsors: IEEE Power Electronics Society, IEEE  
Industry Applications Society**

Last updated: November 2025

## 2013 (Volume 1)

<b>Issue 1</b>	<i>None</i>
<b>Issue 2</b>	<i>None</i>
<b>Issue 3</b>	<i>None</i>
<b>Issue 4</b>	Wind Applications – Part 1

## 2014 (Volume 2)

<b>Issue 1</b>	Wind Applications – Part 2
<b>Issue 2</b>	Advanced Control of Electric Motor Drives
<b>Issue 3</b>	Miniaturized Power Electronics Systems Transportation Electrification
<b>Issue 4</b>	Modeling and Control of Power Electronics for Renewable Energy and Power Systems

## 2015 (Volume 3)

<b>Issue 1</b>	Wireless Power Transfer
<b>Issue 2</b>	<i>None</i>
<b>Issue 3</b>	LED Drivers
<b>Issue 4</b>	Sustainable Energy Systems Integration

## 2016 (Volume 4)

<b>Issue 1</b>	Harmonics Stability and Mitigation in Power Electronics
<b>Issue 2</b>	Green Power Supplies
<b>Issue 3</b>	Wide Bandgap Power Devices and Applications
<b>Issue 4</b>	Resilient Microgrids

## 2017 (Volume 5)

<b>Issue 1</b>	Emerging Electric Ship MVDC Power Technology
<b>Issue 2</b>	Distributed Generation
<b>Issue 3</b>	Structured DC Microgrids
<b>Issue 4</b>	Power Electronics and Systems: Modeling, Analysis, Control, and Stability

## 2018 (Volume 6)

<b>Issue 1</b>	<i>None</i>
<b>Issue 2</b>	Power Supply on Chip
<b>Issue 3</b>	Asynchronous Interconnect and Generation Emerging Topics in Lighting
<b>Issue 4</b>	Predictive Control in Power Electronics, Electrical Drives, and Industrial Applications

## 2019 (Volume 7)

<b>Issue 1</b>	Transient Behavior of Multiscale Megawatt Power Electronic Systems
<b>Issue 2</b>	Resonant and Soft Switching Techniques with Wide Bandgap Devices
<b>Issue 3</b>	Modeling, Design, and Application of Next-Generation Power Components
<b>Issue 4</b>	<i>None</i>

## 2020 (Volume 8)

<b>Issue 1</b>	Modeling, Design and Applications of Next-Generation Power Components
<b>Issue 2</b>	Modeling, Topology, and Control of Grid-Forming Inverters Complex Vector Theory and its Applications in Power Electronic Systems
<b>Issue 3</b>	Topologies, Modeling Methodologies and Control Techniques for High-Frequency Power Conversion
<b>Issue 4</b>	Nonlinear Dynamics in Power Electronics-enabled Energy Systems

## 2021 (Volume 9)

<b>Issue 1</b>	Power Converters and Control Techniques for Very Fast Response Applications
<b>Issue 2</b>	Topology, Modeling, Control, and Reliability of Bidirectional DC/DC Converters in DC Microgrids
<b>Issue 3</b>	DC Protection
<b>Issue 4</b>	Design and Testing Methods of Power Electronics Components and Circuits
<b>Issue 5</b>	Sustainable Energy Through Power Electronics Innovations in Cyber Physical Systems
<b>Issue 6</b>	Recent Advancements of Power Electronics Technology and Applications Fault Tolerant Operation and Stability Enhancement of Power Electronics Dominated Grids

## 2022 (Volume 10)

<b>Issue 1</b>	Capacitively Coupled Power Conversion Systems Cybersecurity of Power Electronics Through Hardware Hardening
<b>Issue 2</b>	Commemorating 40 Years of WEMPEC, 1981-2021
<b>Issue 3</b>	Modeling and Analysis of Interaction Between Grids and Grid-Connected Power Electronics Converters in Distribution Networks
<b>Issue 4</b>	Smart Solid-State Transformers for AC/DC Hybrid Power Grids Emerging Applications of Power Electronics in Developing Economies
<b>Issue 5</b>	Failure Mechanisms, Fault Characterization, and Condition Monitoring of Power Electronics Components and Systems Power Electronics Systems for Aerospace Applications
<b>Issue 6</b>	Emerging Converter Topology, Operation, and Design Technologies Partial Power Conversion and Its Emerging Applications

## 2023 (Volume 11)

<b>Issue 1</b>	Emerging Topics of Power Electronics Interfaced Battery Energy Storage System
<b>Issue 2</b>	Integrated Control and Modulation for Electric Drives
<b>Issue 3</b>	Future of Power Electronics: Components, Circuits, and Systems
<b>Issue 4</b>	Emerging Topics of High-Frequency High-Power Density DC-AC Conversion Technologies
<b>Issue 5</b>	<i>None</i>
<b>Issue 6</b>	Machine Learning Techniques in Power Electronics

## 2024 (Volume 12)

<b>Issue 1</b>	Advanced Charging Technologies for Next-Generation Electric Vehicles
<b>Issue 2</b>	Power Electronics for Distributed Energy Resources
<b>Issue 3</b>	<i>None</i>
<b>Issue 4</b>	Talkative Power Conversion
<b>Issue 5</b>	<i>None</i>
<b>Issue 6</b>	Design and Validation Methodologies for Power Electronics Components and Systems

## 2025 (Volume 13)

<b>Issue 1</b>	<i>None</i>
<b>Issue 2</b>	Advanced Technologies of Motor Drives for Zero-Emission E-Mobility
<b>Issue 3</b>	Digital Twin Driven High-Reliability Power Electronic Systems
<b>Issue 4</b>	High-Frequency Wireless Power Transfer Technology Power Electronics and Drive Systems for Aviation Electrification
<b>Issue 5</b>	<i>None</i>
<b>Issue 6</b>	