

# POWER ELECTRONICS AND DRIVES

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Special Section on:

## Advanced Control Methods of Electrical Machines and Drives

Today, electrical machines have been adopted in more and more applications. Especially, the rapid development of transportation electrification promoted the research popularity of electrical machine and drives to a new level. Conventional control techniques of electrical machines and drives can hardly meet the increasing requirements for operating performance. High power, high reliability, high control precision, low cost, and intelligentization are the main trends in the field of electrical machines and drives. In the current literature, multiport machines and multilevel converters have been studied to improve the power of electrical machines and drives. The cost of electrical drives can be reduced by reducing the number of sensors or power devices. Fault diagnosis and fault-tolerant control are the key measures to improve the reliability of electrical machines and drives. Besides, various control techniques have been developed to enhance the operating performances of electrical machines and drives.

The purpose of this Special Section is to reveal the most recent findings associated with advanced control techniques for electrical machines and drives. The papers to be prepared for this Special Section must include original materials that have not been submitted to or published in any other journal. Academicians and practicing engineers all over the world are invited to submit their recent original research contributions to this Special Section. Topics are, but not limited to:

- ✓ Control of multiphase machines
- ✓ Control of open-end winding machines
- ✓ Control of multi-level converters based electrical drives
- ✓ Fault diagnosis and fault-tolerant control of electrical machines and drives
- ✓ Sensorless control of electrical machines
- ✓ Control of low-cost electrical drives with reduced sensors or power devices
- ✓ Control precision improvement of electrical machines
- ✓ Parameter identification of electrical machines and drives

### Manuscript Preparation and Submission

Check carefully the style of the journal described in the “Guidelines for Authors” in the journal PEAD web site:

<https://sciendo.com/journal/PEAD> or <http://www.ped.pwr.edu.pl/Guidelines-for-authors,311.html>

Please submit your manuscript in electronic form through Editorial System: <http://www.ped.pwr.edu.pl/>

On the submitting page (after log in), in pop-up menu of manuscript type, select: “Special Section”, then upload all your manuscript files following the instructions given on the screen.

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<b>Timetable</b>		
Deadline for manuscript submissions: <b>October 30, 2023</b> (may be extended for request)	Information about manuscript acceptance:  Successively, after the review	Publication date:  Successively, open-volume mode