

## Advanced Informatics and Cybersecurity for Smart Grids

**Theme:** Power system automation is developing in a mind-blowing speed. The ability to communicate with more devices in the grid gives unprecedented opportunities for optimization and control. However, this connectivity comes with an unwanted side-effect: Vulnerabilities in Smart Grid Cyber Security. To address this emerging field, this special section solicits papers on secure and resilient communication and control architectures, secure smart metering, cryptography, key and certificate management, authorization and access control, security threat and vulnerability assessment and measurement, cyber-physical security information and event management, trust and privacy, security design and verification tools, and simulation and performance analysis of security operations and services.

**The main topics of this special issue include, but are not limited to, the following:**

- Real-time performance of cyber-security measures in Smart grids
- Secure communication with different protocols: Modbus, DNP3, IEC 61850 etc.
- Secure and resilient communication and control architectures
- Secure smart metering
- Cryptography, key management, authorization and access control
- Security threat and vulnerability assessment and measurement
- Cyber-physical security information and event management
- Trust and privacy
- Security design and verification tools
- Simulation and performance analysis of security operations and services for smart grids
- IEC 62351 cyber-security standard and its implementation
- Secure Wide-Area Network communication for Advanced Control and Protection Applications
- Cybersecurity for different topologies: Substations, Microgrids, T&D networks

### Manuscript Preparation and Submission

Follow the guidelines in “Information for Authors” in the IEEE Transaction on Industrial Informatics <http://www.ieee-ies.org/pubs/transactions-on-industrial-informatics>. Please submit your manuscript in electronic form through Manuscript Central web site: <https://mc.manuscriptcentral.com/tii>. On the submitting page #1 in popup menu of manuscript type, select: SS on **Advanced Informatics and Cybersecurity for Smart Grids**.

Submissions to this Special Section must represent original material that has been neither submitted to, nor published in, any other journal. Regular manuscript length is 8 pages.

**Note:** The recommended papers for the section are subject to final approval by the Editor-in-Chief. Some papers may be published outside the special section, at the EIC discretion.

<b>Timetable:</b>	<b>Deadline for manuscript submissions</b>	<b>July 30, 2019</b>
	<b>Expected publication date (tentative)</b>	<b>December 2019</b>

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