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# Progress and Challenges in Solar Photovoltaic Materials and Intelligent Control

Guest Editor:

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# **Message from the Guest Editor**

This SI focuses on topics including, but not limited to, the following:

- Solar PV materials, including new and further developed solutions, modeling, and simulations;
- Solar PV cells and modules design;
- Power electronics topology for solar energy;
- Solar PV solutions for off-grid and grid-connected operation;
- Novel optimization and control techniques;
- Modeling, simulation, and stability analysis of PV systems;
- Schemes for increased Solar PV penetration (e.g., coordination with storage);
- Performance analysis of Solar PV modules;
- Economic dispatch for Solar energy systems;
- Renewable energy policy and incentive studies for increased Solar PV penetration;
- New concept of "PV+" to optimize the energy structure of PV generation and consumption.











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## **Editor-in-Chief**

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# Message from the Editor-in-Chief

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