



## Recent Advances in Grid Connected Photovoltaic Systems

Guest Editors:

**Prof. Dr. Hua Geng**

Beijing National Research Center  
for Information Science and  
Technology, Department of  
Automation, Tsinghua University,  
Beijing 100084, China

genghua@tsinghua.edu.cn

**Prof. Dr. Tiago Davi Curi  
Busarello**

Department of Control,  
Automation and Computing  
Engineering, Federal University of  
Santa Catarina, Blumenau 89036-  
256, Brazil

tiago.busarello@ufsc.br

Deadline for manuscript  
submissions:

**15 December 2021**

### Message from the Guest Editors

Dear Colleagues,

Installations of grid-connected photovoltaic systems (GCPs) have been growing rapidly around the world, mainly due to their capacity to generate clean and renewable electricity. Industries and academia are always developing technological advancements for photovoltaic systems aiming at better utilization of electric energy, size reduction, high reliability, and accurate controllers, beyond other relevant topics. In this context, recent advances and new challenges can be addressed.

The focus of this Special Issue is to publish original recent advances of GCPs contributing to the increased use of photovoltaic renewable energy. Topics of interest for this Special Issue include but are not limited to the following areas:

- grid-connected photovoltaic systems
- new maximum power point tracks (MPPT) algorithms;
- performance analysis and case studies in GCPs;
- modeling, control and optimal sizing of GCPs;
- thermal management;
- stability of GCPs,
- grid integration;
- fault ride-through;
- economic analysis;
- energy policies;
- energy management storage;
- intelligent metering;
- reliability-based design of PV systems;
- economics/optimization of hybrid installations



[mdpi.com/si/52112](https://mdpi.com/si/52112)

# Special Issue