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Advances in Photovoltaic Materials and Devices: Preparation, Characterization and Properties

Guest Editor:

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Deadline for manuscript submissions:

10 October 2024

Message from the Guest Editor

Dear Colleagues,

New materials or new production methods photovoltaics have been studied in recent years. Materials used in photovoltaic devices are usually based on technology, crystalline film such silicon as (monocrystalline, polycrystalline or amorphous) gallium arsenide. Second-generation photovoltaic solar cells use thin-film technologies by reducing the material quantity and are based on copper indium gallium selenide. cadmium telluride and copper zinc tin sulfide. Thirdgeneration photovoltaics introduce novel materials such as perovskites. The topics of interest for publication include but are not limited to the following:

- First-, second- and third-generation photovoltaic cells.
- Production methods for PV technology: wafering, etching, diffusion, ion implantation, atomic layer deposition, antireflective coating, metallization, testing.
- Characterization techniques: microwave photoconductance decay (MWPCD), quasi-steadystate photoconductance (QSSPC), external quantum efficiency (EQE), intensity-voltage (IV) curves. luminescence.
- Synthesis and structure of luminescent complexes.
- Photoluminescence measurements.
- Photophysical properties.











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Editor-in-Chief

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Message from the Editor-in-Chief

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