The European Physical Journal

EPJ photovoltaics

An Open Access Journal

Call for Papers

Themed Issue on

Materials, process and manufacturing of Organic & Printed Photovoltaics

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Background

Solar is one of the most promising renewable energies, and at present the lowest LCOE power generator. Some of its features in the current popular inorganic form silicon, however, limits its widespread use. Currently used silicon solar cells with metal and glass supports, which account for over 90% of the deployed photovoltaics, require complex infrastructures strong enough to hold their weight. Furthermore, the modules must be installed facing south and at the correct angle according to the site's latitude. Installation and maintenance of conventional solar cells are costly and requires specialized oversight.

On the other side, printed Organic PhotoVoltaics (OPV) offer significant advantages, such as lightweight, flexibility and robustness to be installed almost anywhere, including on complex and curved surfaces. In this way, solar energy could even be taken to inaccessible places without requiring additional expensive and heavy infrastructure. In addition, OPVs have demonstrated their suitability to be upscaled for industrial manufacturing. The improved efficiencies and increased lifetime testify to the potential for this technology to compete with crystalline silicon–based technologies under most operating conditions.

Aims and Scope of the Themed Issue

We present, in this Topical issue of the EPJ Photovoltaics, a selection of papers (that have undergone the peer-review) from the presentations in the ISFOE21 (5-8 July 2021) and NN21 (6-9 July 2021) conferences that took place in Thessaloniki, Greece, in the frame of the NANOTEXNOLOGY 2021 multi-event.

ISFOE is the biggest scientific & technology event in Flexible Organic & Printed Electronics (OEs), that promotes the Research, Technology, and Innovation in OE Nanomaterials, Nano-Manufacturing Processes, AI and Machine Learning algorithms for Production, Devices and Applications and Solutions.

We focus, in this Topical issue on the OE (Organics, Dyes, Perovskites) Nanomaterials, process, characterization, modelling and manufacturing of Organic & Printed Photovoltaics, hoping this issue will bring to the attention of the reader the hottest topics and progress in this fields.

We also invite Readers/Authors in an Open Discussion related to these topics, in the journal, in the form of '*Comments to*'.

Submissions

All relevant papers will be carefully considered, peer-reviewed by a distinguished team of international experts. The instructions for authors are detailed at: <u>https://www.epj-pv.org/author-information/instructions-for-authors</u>.

Authors are invited to submit their manuscript online at : <u>https://articlestatus.edpsciences.org/is/epjpv/home.php</u> and choose, during the submission, the special issue: '*Materials, process and manufacturing of Organic & Printed Photovoltaics*'.

Submission deadline – October 15, 2021

Article Processing Charges

In partnership with the organizers of the Nanotexnology 2021 conference, the Publisher has decided to waive the charges for the accepted papers of this issue (no charge instead of the 2021 fee that is 300 €). There is no submission fee.

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