

Department of Electrical and Computer Engineering

Title: « Potential and performance of grid-connected multi-junction high-concentrator PV systems »

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Room XOD02 – 117, New Campus – University of Cyprus

Abstract:

The electrical performance and economics of High Concentrator Photovoltaic technology are connected beyond the cell and module levels. The impact of fundamental variables on the calculated energy output and economics of a typical system for real-world solar power plants in various locations with diverse climatic conditions is carried out. The final aim is to provide an overview of the potential and outdoor performance of a representative high-concentrator PV system.

Biography:

Dr. Eduardo F. Fernández received his B.S. in physics from the University of Oviedo, Spain (2004), M.S. in physics (2006), M.S. in renewable energy (2008) and Ph.D. in the area of solar energy from the University of Santiago de Compostela, Spain (2012). He was also awarded the best PhD Thesis award from the Faculty of Physical Sciences. He is currently a research associate at the Centre for Advanced Studies in Energy and Environment of the University of Jaén where he is responsible of the concentrator photovoltaic research activities.

Eduardo has more than 10 years of experience in the field of solar energy and Concentrator Photovoltaics. During this time he has been working in several research Institutes, Universities and private companies, such as Amonix/Guascor Inc. (USA), Fraunhofer ISE Callab (Germany) and the ESI of the University of Exeter (UK). His research interests cover the development, characterization and modelling of concentrator photovoltaic devices and systems. He was also awarded with several grants such as the Juan de la Cierva-Formación 2013 and Juan de la Cierva-Incorporación 2015 fellowships; the most prestigious grants for young researchers in Spain.

He has published over 70 papers in the most highly ranked peer-review journals and conference proceedings and also participated in more than 10 projects with funding exceeding 5M euros within the last 5 years. Eduardo is the co-editor of the book “High Concentrator Photovoltaics: Fundamentals, Engineering and Power Plants”, 2015, for Springer Publishing.

