

PERSONAL INFORMATION

**Daniel Tudor COTFAS**✉ dctofas@unitbv.roPOSITION
IOSUD UTBV

Transilvania University of Braşov
PhD Coordinator
Doctoral studies field : Electronic engineering, telecommunications and information technology
Since: 2019

EXPERTISE FIELD AND
RESEARCH INTEREST AREAS

Renewable energy: conversion of solar energy into electricity and heat; hybrid systems:
photovoltaic cells and panels / thermoelectric generators / solar thermal collectors.
Optoelectronics
Data acquisition and processing

WORK EXPERIENCE

- Oct. 2020-... Professor
Electronics and Computers Department, Electrical Engineering and Computers Science Faculty,
Transilvania University of Braşov, Romania
- Feb.2015-Sep 2020 Assoc. Professor
Electronics and Computers Department, Electrical Engineering and Computers Science Faculty,
Transilvania University of Braşov, Romania □
- Oct 2004-Feb 2015 Lecturer
Electronics and Computers Department, Electrical Engineering and Computers Science Faculty,
and Physics Department, Technological Engineering Faculty, Transilvania University of Braşov,
Romania
- Oct 2002-Sep 2004 Assistant Professor
Physics Department, Technological Engineering Faculty
Transilvania University of Braşov, Romania □
- Sep 1995-Sep 2002 Teacher of Mathematics
Gr. Şc. Ind. Construcţii – Maşini "Astra" Braşov

EDUCATION AND TRAINING

- 2019 Habilitation in Electronic engineering, telecommunications and information technology
Transilvania University of Braşov
- 2002-2008 PhD - Investigation on parameters affecting the photoconversion efficiency in
Pv-cells based on Si and CdTe
Transilvania University of Braşov
- 2000-2002 Master's degree, Statistics, Probability and Systems reliability
Transilvania University of Braşov
- 1990-1995 Bachelor's degree, Mathematics and Physics
Transilvania University of Braşov

PERSONAL SKILLS

Mother tongue(s) Romanian

Other language(s)	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction		Listening
English	B1	B2	B1	B1	B1
French	A1	A2	A1	A1	A1

Communication skills Good communication skills and teamwork abilities

Organisational / managerial skills Management skills gained through leading projects

Job-related skills Using research equipment, experiments, data processing and analysis

Digital skills Advanced knowledge of Microsoft Office, LabVIEW, Origin, Comsol

Other skills Renewable energy, Mathematics, Physics, Optics, Optoelectronics, Virtual instrumentation

Additional Information

a) Project manager

Cercetări asupra sistemelor solare hibride fotovoltaice/termoelectrice/termice PV/TEG/STC. **(2015-2017) Parteneriate II 135/1.10.2015** (UEFISCDI, 545600 lei)

Tehnologii de precipitare dispersă în stare solidă, la nivel nanometric, folosind câmpuri termice cu cicluri staționare și tranzitorii alternante. **(2008-2011) Parteneriate II 72 163** (CNMP, 225000 lei)

The study of the evolution of the photovoltaic cells parameters during the ageing process using the concentrated light and the temperature, **(2014) Sfera II** (CORDIS FP7-INFRASTRUCTURES, 18050 Euro)

The ageing time evolution of the solar cells in function of the concentrated light levels, **(2015) Sfera II** (CORDIS FP7-INFRASTRUCTURES, 18630 Euro)

The behaviour of the solar hybrid structures in medium and high concentrated light, **(2016) Sfera II** (CORDIS FP7-INFRASTRUCTURES, 18050 Euro)

Study of new thermoelectric generator's important parameters in concentrated light, **(2017) Sfera II** (CORDIS FP7-INFRASTRUCTURES, 20415 Euro)

Analysis of PV-TEG hybrid system with a beam splitter in concentrated light using the solar tower, **(2021) Sfera III** (CORDIS FP7-INFRASTRUCTURES, 19400 Euro)

Study of the enhancement in performance of solar thermoelectric generators using absorber layers in low and medium concentrated light, **(2023) Sfera III** (CORDIS FP7-INFRASTRUCTURES, 21400 Euro)

b) Awards

- Gold medal EUROINVENT 2015 – The 7th European Exhibition of Creativity and Innovation
- National Instruments Graphical System Design Achievement Awards 2013 Education Winner
- National Instruments Graphical System Design Achievement Awards 2013 NI Community's Choice
- National Instruments Graphical System Design Achievement Awards 2013 Editor's Choice Award
- Best paper (poster) at REV 2012 Embedded system for mini solar vehicle (<http://rev-conference.org/REV2012/>)
- 1st prize at 2012 Romania NIDays Paper Contest

c) Summary of the main achievements:

- teza - *Investigation on parameters affecting the photoconversion efficiency in Pv-cells based on Si and CdTe*
- 1 carte publicată în edituri internaționale
- 4 capitole de cărți publicate în edituri internaționale
- 6 cărți publicate în edituri naționale
- 120 de articole
 - 64 lucrări indexate ISI
 - 22 lucrări indexate BDI
 - 38 lucrări în volumele conferințelor
- 1 brevet și o cerere de brevet
- 2 invitații - Keynote Speaker
- peste 100 de recenzii pentru jurnale cotate ISI:
 - Renewable & Sustainable Energy Reviews
 - Applied Energy
 - Solar Energy
 - Applied Thermal Engineering
 - IEEE Transactions on Instruments
 - Energy Science & Engineering
 - Journal of Solar Energy Engineering
 - Measurement
 - Journal of Green Energy
 - Sustainable Energy Technologies and Assessments
 - Silicon
 - Meteorology and Atmospheric Physics
 - Bulgarian Chemical Communications
 - Indian Journal of Pure & Applied Physics (IJPAP)
 - Surface and Coatings Technology
 - Frontiers in Energy Research
 - Energies
 - Nano Energy
 - Energy reports
 - Energy

Indici Hirsch: Google Scholar: 16; Scopus: 15; Web of Science Clarivate Analytics: 12

Editor: International Journal of Photoenergy, Frontiers in Energy Research

Lead editor și Guest Editor: Frontiers in Energy Research, International Journal of Photoenergy, Energies, Mathematics, Photonics.