

Transilvania University of Brasov

Faculty of Product Design and Environment

Department of Product Design, Mechatronics and Environment

Proposed topic for doctoral studies admission contest – September 2019

Doctoral field Mechanical Engineering

Doctoral coordinator Prof. dr. eng. Visa Ion

Topic: Solar - thermal collectors of various shapes for built environment integration

Recommended bibliography:

1. Visa I., Comsit M., Duta A., Neagoe M., Moldovan M., Burduhos B., Perniu D., Enesca A., Isac L., Cosnita M., Totu I., Savvides I., Vassiliades C., Novel Solar-Thermal Collectors/Array With Increased Architectural Acceptance For Building Integration, Building Integration of Solar Thermal Systems Design and Applications Handbook, 373-391, COST Office, 2017
2. Visa I., Jaliu C., Duta A., Neagoe M., Comsit M., Moldovan M., Ciobanu D., Burduhos B., Saulescu R., The Role of Mechanisms in Sustainable Energy Systems, Editura Universitatii Transilvania din Brasov, 2015
3. Visa I., Moldovan M., Duta A., Novel triangle flat plate solar thermal collector for facades integration, Renewable Energy, 143, 252-262, 2019
4. Visa I., Duta A., Moldovan M., Outdoor performance of a trapeze solar thermal collector for facades integration, Renewable Energy, 137, 37-44, 2019
5. Visa I., Duta A., Comsit M., Moldovan M.D., Ciobanu D., Saulescu R., Burduhos B.G., Design and experimental optimization of a novel flat plate solar thermal collector with trapezoidal shape for facades integration, Applied Thermal Engineering, 90, 432-443, 2015
6. Moldovan M., Visa I., Duta A., Future trends for solar energy use in nearly zero energy buildings, Advances in Solar Heating and Cooling, 547-569, Elsevier, 2016
7. Kalogirou Soteris, Solar Energy Engineering, 2nd Edition, Springer, 2013
8. John A. Duffie & William A. Beckman, Solar Engineering of Thermal Processes, 2006