

PERSONAL INFORMATION

MOLDOVAN Macedon Dumitru



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WORK EXPERIENCE

- 2017 - present **Associate Professor**  
Transilvania University of Braşov, Eroilor Bd. no. 29, 500036, Braşov, România [www.unitbv.ro](http://www.unitbv.ro)  
**Business or sector** Education, Research
- 2013 - 2017 **Lecturer**  
Transilvania University of Braşov, Eroilor Bd. no. 29, 500036, Braşov, România [www.unitbv.ro](http://www.unitbv.ro)  
**Business or sector** Education, Research
- 2002 - 2013 **Design Engineer**  
S.C. Pentagon S.R.L., Sarmisegetuza Str. no. 5, Braşov, România  
**Business or sector** Facilities for buildings
- 1997 - 2002 **Design Engineer**  
S.C. Design Construct S.A., Mattis Teutsch Str. no. 4, Braşov, România  
**Business or sector** Tender coordinator for buildings and facilities for buildings works

EDUCATION AND TRAINING

- 2014 – 2015 **Postdoctoral Studies in Mechanical Engineering**  
Transilvania University of Braşov  
*Renewable energy based mixes implemented in low energy buildings*
- 2009 – 2012 **Doctoral Studies in Mechanical Engineering**  
Transilvania University of Braşov  
*Efficiency optimization of the photovoltaic systems by strings arrangement and tracking with linkages*
- 2009 – 2011 **Masteral Studies in Civil Engineering**  
Transilvania University of Braşov  
*Improving the energy efficiency in the built environment through performances optimization of solar thermal collector - heat pump hybrid systems*
- 2007 – 2009 **Bachelor Studies in Civil Engineering**  
Transilvania University of Braşov  
*Facilities for Buildings*
- 1996 - 1997 **Masteral Studies in Mechanical Engineering**  
Transilvania University of Braşov  
*Engineering of Tractor - agricultural machine systems*
- 1991 - 1996 **Bachelor Studies in Mechanical Engineering**  
Transilvania University of Braşov  
*Agricultural Mechanics*
- 05 – 07.09.2016 **Training School on Building Integration of Solar Thermal Systems**  
*COST Action TU1205, Warsaw, Poland*
- 15 – 28.07.2013 **International Summer School, Transilvania University of Braşov , România**  
*RESREC (Renewable Energy Systems & Recycling Research Centre) & ESEIA (European Sustainable Energy Innovation Alliance) Sustainable Smart Metropolitan Regions of Tomorrow*
- 04 - 16.07.2010 **Styrian Academy for Sustainable Energies International Summer School**  
*Graz University of Technology, Austria, Regional Sustainable Energy Systems*

PERSONAL SKILLS

Mother tongue Romanian

Other languages

English

UNDERSTANDING		SPEAKING		WRITING
Listening	Reading	Spoken interaction	Listening	
C1	C1	C1	B2	B2

Language Proficiency Certificate no.:808/12.12.2012. B2 Level

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2 Proficient user  
Common European Framework of Reference for Languages

Communication skills

- invited speaker on „Renewable Based Energy Mixes”, at Graz Technological University, Austria, în cadrul proiectului Horizon 2020 *Bioenergy Train* (BET)
- invited speaker on „Nearly Zero Energy Building” at Cyprus University of Technology, Limassol, by prof. as. dr. eng. Alexandros Charalambides, ECSOL – PROGNOSIS project coordinator
- invited speaker on „Renewable Energy Systems and Recycling Research Centre of the R&D Institute of the Transilvania University of Braşov”, at Cyprus University of Technology, Limassol, by prof. as. dr. eng. Alexandros Charalambides, ECSOL – PROGNOSIS project coordinator

Organisational / managerial skills

- member of the Scientific Committee of the Conference for Sustainable Energy CSE2017 – Nearly Zero Energy Communities, Braşov, România
- member of the Product Design and Environment Faculty Student Admission Board 2015-2016
- member of the Scientific Committee of the Conference for Sustainable Energy CSE2014 – Nearly Zero Energy Buildings, Braşov, România
- member of the Interdisciplinary Transilvania University of Braşov Doctoral School Board 2009-2012
- president of the Election Commission of students’ representatives in the Council of Product Design and Environment Faculty and in the University Senate, 2011
- coordination of micro-teams of students to perform internships within Renewable Energy Systems and Recycling Research Centre (RESREC)
- tutoring students for participation in the Student Scientific Sessions
- coordination of bachelor and masteral students for diploma and dissertation thesis with research themes in the field of renewable energy systems (heat pumps, solar thermal and photovoltaic systems) implemented in the built environment of the Research Center RESREC
- tutoring student from Renewable Energy Systems Engineering specialization

Digital competence

- AutoCAD, ArchiCAD, Nemetschek, SolidWorks, Catia, Adams, Tmsys, Ansys, SketchUp
- MatLab, MathCAD, Mathematica, Visual FoxPro, Delphi
- MS Office, Latex, Corel Draw,

Certifications

- Gas authorized installer (design and execution), ID Rank, since 1999
- Authorized electrician (design and execution), IIA, IIB Rank, since 2009

Afilations

- Romanian Professional Association of Facilities for Buildings Engineers, AIIR since 2009
- Romanian Professional Association for Machine and Mechanism Theory, AROTMM since 2010
- International Solar Energy Society, ISES, since 2016

Honours and awards

- Romanian Academy Award „Constantin Budeanu 2017” for the book *The Role of Mechanisms in Sustainable Energy Systems*
- Transilvania University Award for development of scientific research infrastructure; Spaces – Buildings of the R&D Institute of the Transilvania University of Brasov 2011
- Transilvania University Award for Tehnological Transfer 2010
- First prize in the national phase of international student competition organized by REHVA (Federation of European Heating, Ventilation and Air Conditioning Associations) with a research on the "Solar cooling for the Assembly Hall and Library of the Transilvania University of Brasov, Romania, 2009

Driving licence

- B category since 1994

## ADDITIONAL INFORMATION

## Research projects

1. *Optimal design of a renewable energy mix for a multifamily housing complex in Brasov, Romania*, no. 1099 / 2017
2. *Environmental factors and their influence on the performance of solar thermal collectors*; no. 15098 / 2017
3. *BioEnergyTrain (BET)*, Program H2020, H2020-LCE-2014-2, CE, DG Research ctr. GA Nr. 656760
4. *Sustainable autonomous system for nitrites/nitrates and heavy metals monitoring of natural water sources (WaterSafe) M-ERA.NET*, no. 39/2016
5. *Solar-thermal laboratory demonstrator and technology based on arrays of triangle flat plate collectors (Sol\_Tri\_Col)*, PN-III-P2-2.1-PED-2016-0338
6. *Continuous flow advanced wastewater treatment demonstration technology based on thin film photocatalysis and adsorption reactor (PhotoCatFlow)*, PN-III-P2-2.1-PED-2016-0514
7. *Increasing the competitiveness of SC ELDON SRL by optimizing the manufacturing technology of industrial floor cabinets*, no. 102BG/2015
8. *Integrated innovative system materials-technology-equipment for simultaneous photocatalysis and adsorption processes applied in sustainable waste water treatment (SimFotoAd)* PN II no. 217/2014
9. *Innovative sustainable photocatalytic system for self-decontamination of protection equipment CBRN – CB-PhotoDeg* PN II PCCA no. 282/2014
10. *Effect of Clouds of Solar Irradiance (ECSOL-PROGNOSIS)*, Capacity, RO-CY, 765 / 30.04.2014, RO-CY Bilateral cooperation programs
11. *Efficient thermal solar systems with high acceptance for implementation in urban areas (EST IN URBA)*, Proiect Parteneriate PNII 28/2012
12. *R&D Institute High –Tech Products for Sustainable Development (PRODD, ICDT)* Contract 11/2009

## Patents and patent proposals

1. Visa M., Duta-Capra A., Visa I., Moldovan M., Neagoe M., *Continuous-flow tubular reactor for simultaneous processes of photocatalysis and adsorption in suspension*, RO131776 (A0) / 2017
2. Visa M., Moldovan M., Duta-Capra A., Comsit M., Totu I., *Solar energy collectors*, f 2016 0339/2016
3. Visa I., Diaconescu D., Neagoe M., Eftimie E., Serban C., Moldovan M., Saulescu R., Vatasescu Porca M., Burduhos B., Totu I., *Monoaxial orientation mechanism with two linear actuators*, Patent no. RO12799 (B1) / 2016
4. Visa I., Comsit M., Duta A., Neagoe M., Saulescu R., Ciobanu D., Moldovan M., Burduhos B., Perniu D., Enesca A. Isac L., Ienei E., Mihoreanu C., Totu I., *Modular solar thermal collector for the optimisation of the conversion efficiency through experimental testing and for increasing of the architectural acceptance*, RO130275 (A0) / 2015
5. Visa I., Duta-Capra A., Neagoe M., Comsit M., Moldovan M., Burduhos B., *System of flat polygonal solar panels modular built for being integrated into the facades*, RO128860 (A0), 30.09.2013
6. Visa I., Diaconescu D., Neagoe M., Moldovan M., Saulescu R., Vatasescu Porca M.M., Burduhos B., Totu I., Serban C., Grigorescu C.M., *Orienting mechanism with two parallelly connected linear actuators for photovoltaic series*, RO128315 (A0), 2013
7. Visa I., Diaconescu D., Neagoe M., Jaliu C., Alexandru C., Dobre B., Botoman M., Saulescu R., Moldovan M., Porca Vatasescu M., *Low speed actuator with intermittent articulated reducer*, RO128120 (A0), 2013
8. Visa I., Dombi V., Neagoe M., Moldovan M., Saulescu R., Totu I., Badea M., Vatasescu Porca M., Serban C., *System and method for orienting a flat thermal solar collector depending on the thermal need*, RO127678 (A0), 2012

## Books and book chapters

1. Moldovan M., Visa I., *Renewable Energy Systems for a Multi-family Building Community*, Nearly Zero Energy Communities, 129-147, Springer, 2017
2. Visa I., Duta A., Moldovan M., Burduhos B., *Implementing Renewable Energy Systems in Nearly Zero Energy Communities*, Nearly Zero Energy Communities, 3-24, Springer, 2017
3. Burduhos B., Duta A., Moldovan M., *The Role of Energy Management Systems in nZEB and nZEC*, Nearly Zero Energy Communities, 50-69, Springer, 2017
4. Comsit M., Moldovan M., Neagoe M., *Deployable Mobile Units Concepts for Photovoltaic and Solar Thermal Arrays*, Nearly Zero Energy Communities, 364-374, Springer, 2017
5. 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
6. Moldovan M., Visa I., Duta A., *Future trends for solar energy use in nearly zero energy buildings (nZEB)*, Woodhead Publishing Series In Energy, Elsevier, 2016
7. Visa I., Neagoe M., Moldovan M., *Structural synthesis of planar geared linkage mechanisms as multibody systems*, 99-106, Springer, 2016
8. Burduhos B. G., Moldovan M. D., *Control of renewable energy systems*, Transilvania University of Brasov Publishing House, 2016
9. 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*, Transilvania University of Brasov

Publishing House, 2015

10. Moldovan M., Visa I., Ciobanu I., *Towards nZEB—sustainable solutions to meet thermal energy demand in office buildings*, Sustainable Energy in the Built Environment - Steps Towards nZEB Springer Proceedings in Energy, 115-133, Springer, 2014
  11. Comsit M., Visa I., Moldovan M. D., Isac L., *Architecturally integrated multifunctional solar-thermal façades*, Sustainable Energy in the Built Environment - Steps Towards nZEB, 47-65, Springer, 2014
  12. Moldovan M., Visa I., Saulescu R., Comsit M., *Four-bar linkages with linear actuators used for solar trackers with large angular diurnal strokes*, The 11th IFToMM International Symposium on Science of Mechanisms and Machines, 411-423, Springer, 2014
  13. Vatasescu M., Moldovan M., Burduhos B., *Linkages for solar tracking*, Transilvania University of Brasov Publishing House, 2011
- Scientific articles
1. Moldovan M., Visa I., Duta A., *Enhanced sustainable cooling for low energy office buildings in continental temperate climate*, in print ASCE's Journal of Energy Engineering, 2017
  2. Visa I., Moldovan M., Comsit M., Duta A. *Infield output of a new solar-thermal façade with increased architectural acceptance*, Advanced Materials - TechConnect Briefs, 2, 62-65, 2017
  3. Visa I., Moldovan M., Comsit M., Neagoe M., Duta A., *Facades integrated solar-thermal collectors – challenges and solutions*, Energy Procedia, 112, 176-185, 2017
  4. Visa I., Burduhos B.G., Neagoe M., Moldovan M.D., Duta A., *Comparative analysis of the infield response of five types of photovoltaic modules*, Renewable Energy, 95, 178-190, 2016
  5. Visa I., Cotorcea A., Neagoe M., Moldovan M., *Adaptability of solar energy conversion systems on ships*, IOP Conference Series: Materials Science and Engineering, 147 (1), 012070, 2016
  6. Visa I., Cotorcea A., Moldovan M., Neagoe M., *Two degrees of freedom parallel linkage to track solar thermal platforms installed on ships*, IOP Conference Series: Materials Science and Engineering, 147 (1), 012071, 2016
  7. 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
  8. Moldovan M., Visa I., Neagoe M., *Optimising the strokes and loads of the linear actuators in a two degrees of freedom linkage used in solar tracking systems*, Proceedings of the 14th IFToMM World Congress, Taipei, Taiwan, 2015
  9. Visa I., Neagoe M., Moldovan M., *Algorithm for structural synthesis of planar mechanisms as multibody systems*, Proceedings of the 14th IFToMM World Congress, Taipei, Taiwan, 2015
  10. Cotorcea A., Visa I., Moldovan M., Ristea M., *Performance assessment of solar thermal collectors in various sea states*, Scientific Bulletin Mircea cel Batran Naval Academy 18 (1), 173, 2015
  11. Visa I., Moldovan M., Comsit M., Duta A., *Improving the renewable energy mix in a building towards the nearly zero energy status*, Energy and Buildings, 68, 72-78, 2014
  12. Visa I., Comsit M., Moldovan M., Duta A., *Outdoor simultaneous testing of four types of photovoltaic tracked modules*, Journal of Renewable and Sustainable Energy 6, 033142, 1-12, 2014
  13. Moldovan M., Visa I., Neagoe M., Burduhos B., *Solar heating & cooling energy mixes to transform low energy buildings in nearly zero energy buildings*, Energy Procedia, 48, 924-937, 2014
  14. Neagoe M., Visa I., Burduhos B., Moldovan M., *Thermal load based adaptive tracking for flat plate solar collectors*, Energy Procedia, 48, 1401-1411, 2014
  15. Visa I., Neagoe M., Moldovan M., Comsit M., *Structural synthesis of parallel linkages by multibody systems method*, Applied Mechanics and Materials, 658, 153-160, 2014
  16. Neagoe M., Visa I., Cretescu N., Moldovan M., *On a new parallel tracking system for accurate orientation of concentrated solar converters*, Applied Mechanics and Materials, 658, 105-110 2014
  17. Moldovan M., *Renewable Energy Mixes For Sustainable Agrosystems*, The VIIIth Edition of the Annual Conference the Academic Days of the Academy of Technical Sciences in Romania – Products and Technologies for Sustainable Development, 356-362, 2014
  18. Moldovan M., Visa I., Duta A., *The influence of thermal zoning on the thermal comfort and energy consumption in low energy office buildings*, Proceedings of the 45th International Congress & Exhibition on Heating, Refrigeration and Air Conditioning, Belgrad, Serbia, 2014
  19. Visa I., Diaconescu D., Moldovan M., *A new solar tracking linkage with 2 actuators in parallel connected*, 2<sup>nd</sup> IFToMM Asian Conference on Mechanism and Machine Science, Tokyo, 2012
  20. Moldovan M., Visa I., Burduhos B., *Energetic autonomy for a solar house*, Environmental Engineering and Management Journal, 10, 9, 1283-1290, 2011
  21. Burduhos B., Toma C., Neagoe M., Moldovan M., *Pseudo-equatorial tracking optimization for small photovoltaic platforms*, Environmental Engineering and Management Journal, 10, 1059-1068, 2011
  22. Moldovan M., Visa I., Burduhos B., *Energy modeling of a single axis tracked string PV system from a hybrid RES*, Proceedings of 26th European Photovoltaic Solar Energy Conference and Exhibition, Hamburg, Germany, 3804-3807, 2011
  23. Schaletchi I., Visa I., Velicu R., Moldovan M., *Torsion moment from wind action on pv platforms*, Proceedings of 26th European Photovoltaic Solar Energy Conference and Exhibition, Hamburg, Germany, 3556-3559, 2011
  24. Moldovan M., Visa I., Duta A., *Energetic monitoring and optimization of a solar house*, Bulletin of the Transilvania University of Braşov, 3 (52), Series I: Engineering Sciences, 91-98, 2010

25. Moldovan M., Boian I., *Heat pump operation & data collection*, Proceedings of Sixth International Conference Mechanics And Machine Elements, Sofia, Bulgaria, 261-270, 2010
26. Boian I., Serban A., Moldovan M., Chiriac F., *Heat pump testing rig*, Proceedings of 19th Conference Installation for Building and the Ambient Comfort, 135-144, Timișoara, Romania, 2010
27. Dombi V., Visa I., Moldovan M., Burduhos B., *Step orientation system for a solar thermal platform*, Proceedings of 6th International Symposium Shape, Mechanical And Industrial Design Of Products In Mechanical Engineering Kod 2010 Palic, Serbia, 265-268, 2010
28. Dombi V., Moldovan M., Boian I., Visa I., *Thermal comfort in an office room*, Proceedings of 10th REHVA world congress Clima Sustainable Energy Use in Buildings Antalya, Turkey, 307-308, 2010
29. Boian I., Serban A., Moldovan M., Chiriac F., *Heat pump laboratory*, Proceedings of 1st international conference on manufacturing engineering, Quality And Production Systems, 136-141, 2009
30. Boian I., Moldovan M., *Energy efficient operation of the open loop heat pump systems*, Bulletin of the Transilvania University of Brașov, 2 (51), Series I: Engineering Sciences, 361-370, 2009

#### Conferences

1. Moldovan M., Visa I., Duta A., *Upgrading Building Envelopes Using Façade Integrated Solar Thermal Collectors*, 3rd International Conference on Smart Energy Systems in Cities and Regions, Dublin Institute of Technology, Ireland, 2018
2. Visa I., Neagoe M., Moldovan M., Comsit M., *Solar Tracking Parallel Linkage Applicable for all Latitudes*, 12th IFToMM International Symposium on Science of Mechanisms and Machines SYROM, Iasi, Romania, 2017
3. Moldovan M., Visa I., *Renewable Energy Systems for a Multi-family Building Community*, Conference for Sustainable Energy (CSE) - Nearly Zero Energy Communities, Brasov, Romania, 2017
4. Visa I., Duta A., Moldovan M., Burduhos B., *Implementing Renewable Energy Systems in Nearly Zero Energy Communities*, Conference for Sustainable Energy (CSE) - Nearly Zero Energy Communities, Brasov, Romania, 2017
5. Burduhos B., Duta A., Moldovan M., *The Role of Energy Management Systems in nZEB and nZEC*, Conference for Sustainable Energy (CSE) - Nearly Zero Energy Communities, Brasov, Romania, 2017
6. Comsit M., Moldovan M., Neagoe M., *Deployable Mobile Units Concepts for Photovoltaic and Solar Thermal Arrays*, Conference for Sustainable Energy (CSE) - Nearly Zero Energy Communities, Brasov, Romania, 2017
7. Visa I., Duta A., Moldovan M., *Nearly Zero Energy Community a Transition Concept Towards Sustainability*, Romanian Academy of Technical Sciences Conference, Constanta, Romania, 2017
8. Visa I., Moldovan M., Comsit M., Duta A., *Infield output of a new solar-thermal façade with increased architectural acceptance*, TechConnect World Innovation Conference, Washington, USA, 2017
9. Moldovan M., Visa I., Duta A., *Experimental evaluation of the efficiency of Photovoltaic / Thermal (PV/T) modules integrated in the built environment*, First International Conference on Building Integrated Renewable Energy Systems, BIRES 2017, Dublin Ireland, 2017
10. Visa I., Duta A., Moldovan M., *Outdoor performance of a trapeze solar-thermal collector for facades integration*, First International Conference on Building Integrated Renewable Energy Systems, BIRES 2017, Dublin, Ireland, 2017
11. Moldovan M., Visa I., Burduhos B., Moldovan C., *Optimizing the opaque to glazed ratio in office buildings to increase the solar fraction in the sustainable energy mix*, 11th ISES EuroSun International Conference on Solar Energy for Buildings and Industry, Palma, Spain, 2016
12. Visa I., Duta A., Comsit M., Moldovan M., *Optimised prototype of a novel trapeze solar-thermal collector for facades integration*, 11th ISES EuroSun International Conference on Solar Energy for Buildings and Industry, Palma, Spain, 2016
13. Visa I., Cotorcea A., Moldovan M., Neagoe M., *Two degrees of freedom tracking system for solar thermal platforms installed on ships*, 7th International Conference on Advanced Concepts in Mechanical Engineering ACME 2016, Iasi, Romania, 2016
14. Visa I., Cotorcea A., Neagoe M., Moldovan M., *Adaptability of solar energy conversion systems on ships*, 7th International Conference on Advanced Concepts in Mechanical Engineering ACME, Iasi, Romania, 2016
15. Moldovan M., Neagoe M., Visa I., *Renewable energy systems for agricultural buildings*, Sixth International Conference On Energy Efficiency And Agricultural Engineering, Ruse, Bulgaria, 2015
16. Neagoe M., Moldovan M., Burduhos B., *Sustainable Mobile Buildings For Agriculture*, Sixth International Conference On Energy Efficiency And Agricultural Engineering, Ruse, Bulgaria, 2015
17. Moldovan M., Visa I., Neagoe M., *Optimising the strokes and loads of the linear actuators in a two degrees of freedom linkage used in solar tracking systems*, The 14th IFToMM World Congress, Taipei, Taiwan, 2015
18. Visa I., Neagoe M., Moldovan M., *Algorithm for structural synthesis of planar mechanisms as multibody systems*, The 14th IFToMM World Congress, Taipei, Taiwan, 2015
19. Moldovan M., Visa I., *Decreasing the cooling load in low energy buildings by natural night ventilation*, World Renewable Energy Congress WREC XIV, Bucuresti, Romania, 2015
20. Moldovan M., Visa I., Duta A., *The influence of thermal zoning on the thermal comfort and energy*

- consumption in low energy office buildings*, 45th International Congress & Exhibition on Heating, Refrigeration and Air Conditioning, KHG, Belgrad, Serbia, 2014
21. Moldovan M., Visa I., Ciobanu D., *Towards nZEB—sustainable solutions to meet thermal energy demand in office buildings*, 4th Conference on Sustainable Energy, CSE, Brasov, Romania, 2014
  22. Comsit M., Visa I., Moldovan M., Isac L., *Architecturally integrated multifunctional solar-thermal façades*, 4th Conference on Sustainable Energy, CSE, Brasov, Romania, 2014
  23. Burduhos B., Visa I., Neagoe M., Moldovan M., Duta A., *Tracking algorithms for solar energy conversion systems: comparative analysis*, 29th European Photovoltaic Solar Energy Conference and Exhibition, EUPVSEC, Amsterdam, Netherlands, 2014
  24. Visa I., Duta A., Moldovan M., Ciobanu D., *Using a heat pump – photovoltaic system to transform a low energy building into a nearly zero energy building*, International Conference on Solar Energy and Buildings, EuroSun, Aix les Bains, France, 2014
  25. Moldovan M., Visa I., Duta A., *Improving the efficiency in low energy office buildings through thermal zoning optimization an experimental approach*, World Renewable Energy Congress, WREC, London, Great Britain, 2014
  26. Visa I., Moldovan M., Duta A., *Sustainable and affordable energy mixes for nearly zero energy buildings*, World Renewable Energy Congress, WREC, London, Great Britain, 2014
  27. Neagoe M., Visa I., Duta A., Moldovan M., Ciobanu D., Burduhos B., *Multi-purpose tracking of flat plate solar collectors*, World Renewable Energy Congress, WREC, London, Great Britain, 2014
  28. Comsit M., Visa I., Moldovan M., Duta A., Neagoe M., *Increasing the efficiency of facade integrated solar thermal collectors by using single-axis tracking systems*, World Renewable Energy Congress, WREC, London, Great Britain, 2014
  29. Visa I., Neagoe M., Moldovan M., Comsit M., *Structural synthesis of parallel linkages by multibody systems method*, 6th International Conference ACME, Iasi, Romania, 2014
  30. Neagoe M., Visa I., Cretescu N., Moldovan M., *On a new parallel tracking system for accurate orientation of concentrated solar convertors*, 6th International Conference Advanced Concepts In Mechanical Engineering, ACME, Iasi, Romania, 2014
  31. Visa I., Moldovan M., Duta A., *Steps to transform a low energy building towards the nearly zero energy status*, Conference Smart and Green Transitions in Regions, Twente, Netherlands, 2014
  32. *Mixuri de energii regenerabile pentru agricultura sustenabilă*, Conferința Energii regenerabile și soluții de aplicare a lor în agricultură, AGIR, București, România, 2014
  33. Moldovan M., Visa I., Saulescu R., Comsit M., *Four-bar linkages with linear actuators used for solar trackers with large angular diurnal strokes*, The 11th IFToMM International Symposium on Science of Mechanisms and Machines, SYROM, Brasov, Romania, 2013
  34. Moldovan M., *Renewable energy mixes for sustainables agrosystems*, The VIIIth Edition of the Annual Conference the Academic Days of the Academy of Technical Sciences in Romania – Products and Technologies for Sustainable Development, Brasov, Romania, 2013
  35. Moldovan M., Visa I., Comsit M., *Sustainability of a string type photovoltaic platform intended to ensure the nearly zero energy status for a solar house*, 28th European Photovoltaic Solar Energy Conference and Exhibition, EUPVSEC, Paris, France, 2013
  36. Visa I., Comsit M., Moldovan M., Duta A., *Façade integrated arrays of PVs and solar thermal flat plate collectors*, 28th European Photovoltaic Solar Energy Conference and Exhibition, EUPVSEC, Paris, France, 2013
  37. Burduhos B., Neagoe M., Jaliu C., Comsit M., Moldovan M., Saulescu R., *Experimental study on the influence of solar tracking algorithms on temperature and conversion efficiency of si-polycrystalline PV*, 28th European Photovoltaic Solar Energy Conference and Exhibition, Paris, France, 2013
  38. Comsit M., Visa I., Burduhos B., Moldovan M., *Efficiency analysis for four different types of pv modules by using an outdoor tracked platform*, 28th European Photovoltaic Solar Energy Conference and Exhibition, EUPVSEC, Paris, France, 2013
  39. Moldovan M., Visa I., Neagoe M., Burduhos B., *Solar heating & cooling energy mixes to transform low energy buildings in nearly zero energy buildings*, International Conference on Solar Heating and Cooling for Buildings and Industry, SHC, Freiburg, Germany, 2013
  40. Neagoe M., Visa I., Burduhos B., Moldovan M., Duta A., *Thermal load based adaptive tracking for flat plate solar collectors*, International Conference on Solar Heating and Cooling for Buildings and Industry, SHC, Freiburg, Germany, 2013
  41. Visa I., Moldovan M., Duta A., *Tailored Solutions to reach the nearly zero energy building status*, The first International Conference 3E – Energy, Environment and Efficiency, Galati Romania, 2013
  42. Neagoe M., Visa I., Moldovan M., Burduhos B., *Novel tracking systems for increasing the overall efficiency of the solar energy conversion*, The first International Conference 3E – Energy, Environment and Efficiency, Galati, Romania, 2013
  43. Moldovan M., Visa I., *Sustainable Built Environment. A case study for a solar house*, CAPE Forum 2013, Graz University of Technology, Austria, 2013
  44. Visa I., Diaconescu D., Moldovan M., *A new solar tracking linkage with 2 actuators in parallel connected*, The 2nd IFToMM Asian Conference on Mechanism and Machine Science, Tokyo, 2012
  45. Moldovan M., Visa I., Burduhos B., *Energetic autonomy for a solar house*, The 3rd International Conference on Sustainable Energy, CSE, Transilvania University of Brasov, Romania, 2011

46. Burduhos B., Toma C., Neagoe M., Moldovan M., *Pseudo-equatorial tracking optimization for small photovoltaic platforms from Toronto/Canada*, The 3rd International Conference on Sustainable Energy, CSE, Transilvania University of Brasov, Romania, 2011
47. Moldovan M., Visa I., Duta A., Promoting the concept of low energy building, Cooperation in R&D&Innovation for Economic and Social Development in CBC Area Romania – Bulgaria INNOGATE 21, Giurgiu, Romania, 2011
48. Moldovan M., Visa I., Burduhos B., *Energy modeling of a single axis tracked string PV system from a hybrid RES*, 26th European Photovoltaic Solar Energy Conference and Exhibition, Hamburg, Germany, 2011
49. Schaletchi I., Visa I., Velicu R., Moldovan M., *Torsion moment from wind action on PV platforms*, 26th European Photovoltaic Solar Energy Conference and Exhibition, Hamburg, Germany, 2011
50. Moldovan M., Visa I., Badea M., *Nearly zero energy building with hybrid PV-HP system*, Solar and Wind International Conference SWIC, Agigea, Romania, 2011
51. Moldovan M., Nastase G., Visa I., Serban A., *Solar cooling at transilvania university of brasov assembly hall and library*, representing Romania at REHVA Student Competition, 10th REHVA World Congress CLIMA 2010 - Sustainable Energy Use in Buildings Antalya, Turkey, 2010
52. Moldovan M., Boian I., Serban A., Chiriac F., *Heat pump laboratory and data acquisition*, 19th International Conference Facilities for Buildings and Indoor Comfort, Timisoara, Romania, 2010
53. Dombi V., Moldovan M., Boian I., Visa I., *Thermal comfort in an office room*, Proceedings of 10th REHVA world congress Clima Sustainable Energy Use in Buildings, Antalya, Turkey, 2010
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