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Studies: Diploma in Physics, University of Patras, 1996
Master of Science, University of Patras, 1999
PhD in Physics, University of Patras, 2003

Research Field: Solar Energy

Foreign languages: English

Research activities: Solar Energy, Flat plate collectors, Thermosiphonic solar water
heaters, Integrated Collector Storage (ICS) water heaters, Air
collectors, Compound Parabolic Concentrator (CPC) solar collectors,
Low concentration solar energy systems, Photovoltaics, Concentrating
Photovoltaics, Hybrid Photovoltaic/Thermal (PV/T) solar systems,
Passive solar systems, Greenhouses, Small wind turbines.

Publications: 29 Journal Papers
47 papers in International Conference Proceedings
18 papers in National Conference Proceedings
707 References in published journal papers by other researchers

H index: 15

EC FUNDED PROJECTS

1. "Testing of double glazing systems". TMR, LECE Laboratory, PSA, (1996–1997).
2. "Glazing testing with regard to external convection effects". TMR, LECE Laboratory, PSA, (1997–1998).
3. "Building Implementation of Photovoltaics with Active Control of Temperature (Building IMPACT)". JOULE Project «JOR3-CT98-0308», (1998–2000).
4. "PV CATAPULT". 6th Framework Program (2003–2006).
5. "Design and performance improvement of CPC type ICS solar water heaters". Greece/Tunisia (2006–2008).
6. "Building Integration of Solar Thermal Systems (BISTS)". European Cooperation in the field of Scientific and Technical Research, COST Action: TUM 1205, (2013-2016).

REVIEWER IN:

- Renewable Energy (Member of the Editorial Board), Elsevier Science.
- Solar Energy, Elsevier Science.
- Applied Energy, Elsevier Science.
- Energy, Elsevier Science.
- Energy Conversion and Management, Elsevier Science.
- International Journal of Thermal Science, Elsevier Science.
- Renewable & Sustainable Energy Reviews, Elsevier Science.
- International Journal of Sustainable Energy, Taylor & Francis.
- Biosystems Engineering, Elsevier Science.
- Journal of Zhejiang University-SCIENCE A, Springer.
- International Journal of Physical Sciences, Academic Journals.
- ISRN Renewable Energy (Member of the Editorial Board), International Scholarly Research Network.
- International Journal of Photoenergy, Hindawi Publishing Corporation.
- Desalination and Water Treatment, Taylor & Francis.
- International Journal of Low-Carbon Technologies, Oxford University Press.

JOURNAL PUBLICATIONS

1. Y. Tripanagnostopoulos, P. Yianoulis, S. Papaefthimiou, M. Souliotis, Th. Nousia. "Cost Effective Asymmetric CPC Solar Collectors". *Renewable Energy*, Volume 16, Issues 1-4, pp 628–631 (1999).
2. Y. Tripanagnostopoulos, M. Souliotis, Th. Nousia. "Solar ICS systems with two cylindrical storage tanks". *Renewable Energy*, Volume 16, Issues 1-4, pp. 665-668, (1999).
3. Y. Tripanagnostopoulos, M. Souliotis, Th. Nousia. "Solar Collectors with Colored Absorbers". *Solar Energy*, Volume 68, Issue 4, pp. 343–356, (2000).
4. Y. Tripanagnostopoulos, Th. Nousia, M. Souliotis, P. Yianoulis. "Hybrid Photovoltaic/Thermal Solar Systems". *Solar Energy*, Volume 72, Issue 3, pp. 217–234, (2002).
5. Y. Tripanagnostopoulos, M. Souliotis, Th. Nousia. "CPC Type Integrated Collector Storage Systems". *Solar Energy*, Volume 72, Issue 4, pp. 327–350, (2002).
6. Y. Tripanagnostopoulos, M. Souliotis. "ICS solar systems with horizontal cylindrical storage tank and reflector of CPC or involute geometry". *Renewable Energy*, Volume 29, Issue 1, pp. 13–38, (2004).
7. Y. Tripanagnostopoulos, M. Souliotis. "ICS solar systems with horizontal (E–W) and vertical (N–S) cylindrical water storage tank". *Renewable Energy*, Volume 29, Issue 1, pp. 73–96, (2004).
8. Y. Tripanagnostopoulos, M. Souliotis. "Integrated collector storage solar systems with asymmetric CPC reflectors". *Renewable Energy*, Volume 29, Issue 2, pp. 223–248, (2004).
9. M. Souliotis, Y. Tripanagnostopoulos. "Experimental study of CPC type ICS solar systems". *Solar Energy*, Volume 76, Issue 4, pp. 389–408, (2004).
10. S. Kalogirou, Y. Tripanagnostopoulos, M. Souliotis. "Performance of solar systems employing collectors with colored absorber". *Energy and Building*, Volume 37, Issue 8, pp. 824–835, (2005).
11. Y. Tripanagnostopoulos, M. Souliotis, R. Battisti, A. Corrado. "Energy, Cost and LCA Results of PV and Hybrid PV/T Solar Systems". *Progress in Photovoltaics: Research and Applications*, Volume 13, Issue 3, pp. 235–250, (2005).
12. Y. Tripanagnostopoulos, M. Souliotis, J. K. Tonui, A. Kavga. "Irradiation aspects for energy balance in greenhouses". *Acta Horticulturae*, Volume 691, pp. 733-740, (2005).
13. Y. Tripanagnostopoulos, M. Souliotis, R. Battisti, A. Corrado. "Performance, cost and life cycle assessment study of hybrid PVT/AIR solar systems". *Progress in Photovoltaics: Research and Applications*, Volume 14, Issue 1, pp. 65–76, (2006).
14. Y. Tripanagnostopoulos, M. Souliotis. "ICS solar systems with two water tanks". *Renewable Energy*, Volume 31, Issue 11, pp. 1698–1717, (2006).
15. M. Souliotis, Y. Tripanagnostopoulos, A. Kavga. "The use of Fresnel lenses to reduce the ventilation needs of greenhouses". *Acta Horticulturae*, Volume 719, pp. 107-113, (2006).
16. M. Souliotis, Y. Tripanagnostopoulos. "Study of the distribution of the absorbed solar radiation on the performance of a CPC type ICS water heater". *Renewable Energy*, Volume 33, Issue 5, pp. 846–858, (2008).
17. M. Souliotis, S. Kalogirou, Y. Tripanagnostopoulos. "Modelling of an ICS solar water heater using Artificial Neural Networks and TRNSYS". *Renewable Energy*, Volume 34, Issue 5, pp. 1333–1339, (2009).
18. Y. Tripanagnostopoulos, M. Souliotis, Th. Makris, P. Georgostathis, M. Sarris. "Design and Performance of a Hybrid PV/T Solar Water Heater". *AIP Conference Proceedings*, 1203, pp. 1019-1024, (2010).
19. Y. Tripanagnostopoulos, M. Souliotis, Th. Makris. "Combined Solar and Wind Energy Systems". *AIP Conference Proceedings*, 1203, pp. 1025-1030, (2010).
20. Y. Tripanagnostopoulos, D. Chemisana, J. Roseli, M. Souliotis. "New CPV Systems with Static Reflectors". *AIP Conference Proceedings*, 1277, pp. 199-202, (2010).
21. M. Souliotis, P. Quinlan, Y. Tripanagnostopoulos, M. Smyth, A. Zacharopoulos, M. Ramirez, P. Yianoulis. "Heat retaining integrated collector storage system with asymmetric CPC reflector". *Solar Energy*, Volume 85, Issue 10, pp. 2474-2487, (2011).
22. D. Chemisana, Y. Tripanagnostopoulos, Chr. Lamnatou, M. Souliotis, J. I. Roseli. "Tilt Optimization of a Building Integrated Solar Concentrating Unit". *AIP Conference Proceedings*, 1477, pp. 217-220, (2012).
23. M. Souliotis, D. Chemisana, Y. G. Caouris, Y. Tripanagnostopoulos. "Experimental study of integrated collector storage solar water heaters". *Renewable Energy*, Volume 50, February 2013, pp. 1083–1094, (2013).
24. D. Chemisana, J. Barrau, J. I. Rosell, B. Abdel-Mesih, M. Souliotis, F. Badia. "Optical performance of solar reflective concentrators: A simple method for optical assessment". *Renewable Energy*, Volume 57, September 2013, pp. 120–129, (2013).

25. Y. G. Caouris, M. Souliotis. "Examination of top and bottom inlet position in horizontal mantle heat exchanger solar thermosiphonic circuits". Accepted for publication in *International Journal of Sustainable Energy*, (2013).
26. M. Souliotis, R. Singh, S. Papaefthimiou, I. J. Lazarus, K. Andriosopoulos. "Integrated Collector Storage Solar Water Heaters: Survey and Recent developments". Accepted for publication in *Energy Systems*, ENSY-D-14-00096R1, DOI: 10.1007/s12667-014-0139-z, (2014).

INTERNATIONAL CONFERENCE PUBLICATIONS

1. G. Leftheriotis, S. Papaefthimiou, M. Souliotis, Y. Tripanagnostopoulos, P. Yianoulis. "Temperature fields for double glazing units under partial shading". Proc. 1st Users Workshop TMR, PSA, pp. 155-161, Almeria, Spain, 18-19 November 1997, (1998).
2. P. Yianoulis, S. Papaefthimiou, G. Leftheriotis, Y. Tripanagnostopoulos, M. Souliotis. "Temperature fields for double glazing units under partial shading". Proc. Int. Conf. WREC V, PART III, pp. 1591-1594, Florence, Italy, 20-25 September, (1998).
3. Y. Tripanagnostopoulos, Th. Nousia, M. Souliotis. "Hybrid PV-ICS systems". Proc. Int. Conf. WREC V, PART III, pp. 1788-1791, Florence, Italy, 20-25 September, (1998).
4. G. Leftheriotis, Th. Nousia, S. Papaefthimiou, M. Souliotis, Y. Tripanagnostopoulos, P. Yianoulis. "Glazing testing with regard to external convection effects". Proc. 2nd Users Workshop TMR, PSA, pp. 175-180, Almeria, Spain, 10-11 November 1998, (1999).
5. Y. Tripanagnostopoulos, Th. Nousia, M. Souliotis. "Low cost improvements to building integrated air cooled hybrid PV-Thermal systems". Proc. 16th European PV Solar Energy Conf., Volume II, pp. 1874-1877, Glasgow, U.K., 1-5 May, (2000).
6. Y. Tripanagnostopoulos, M. Souliotis, T. Nousia. "Building integrated improved solar energy system". Proc. Int. Conf. "Ecological Protection of Planet Earth", Volume II, pp. 775-782, Xanthi, Greece, 5-8 June, (2001).
7. Y. Tripanagnostopoulos, Th. Nousia, M. Souliotis. "Test results of air cooled modified PV modules". Proc. 17th European PV Solar Energy Conf., Volume III, pp. 2519-2522, Munich, Germany, 22-26 October, (2001).
8. Y. Tripanagnostopoulos, M. Souliotis. "ICS solar system with asymmetric CPC reflectors". Proc. (in CD, Solar Thermal Applications) Int. Conf. WREC VII, Cologne, Germany, 29 June – 5 July, (2002).
9. M. Souliotis, Y. Tripanagnostopoulos. "CPC type ICS solar water heaters". Proc. (in CD, P5 142) Int. ISES Solar World Congress, Goteborg, Sweden, 15-20 June, (2003).
10. Y. Tripanagnostopoulos, M. Souliotis. "Double tank ICS solar systems". Proc. (in CD, P5 143) Int. ISES Solar World Congress, Goteborg, Sweden, 15-20 June, (2003).
11. Y. Tripanagnostopoulos, M. Souliotis, R. Battisti, A. Corrado. "Application aspects of hybrid PV/T solar systems". Proc. (in CD, P2 65) Int. ISES Solar World Congress, Goteborg, Sweden, 15-20 June, (2003).
12. Y. Tripanagnostopoulos, M. Souliotis. "Alternative systems for a wider solar energy application". Proc. Int. Conf. ESTEC 2003, pp. 192-195, Freiburg, Germany, 26-27 June, (2003).
13. Y. Tripanagnostopoulos, S. Tselepis, M. Souliotis, J.K. Tonui. "Design aspects of hybrid PVT/WATER solar systems". Proc. 19th Eur. PV Solar Energy Conf., Volume II, pp. 2321-2324, Paris, France, 7-11 June, (2004).
14. Y. Tripanagnostopoulos, M. Souliotis, R. Battisti, A. Corrado. "Application aspects of hybrid PVT/AIR solar systems". Proc. Int. Conf., EuroSun2004, Volume I, pp. 744-753, Freiburg, Germany, 22-25 June, (2004).
15. S. Kalogirou, Y. Tripanagnostopoulos, M. Souliotis. "Modeling and simulation of solar systems employing collectors with colored absorber". Proc. Int. Conf. EuroSun2004, Volume I, pp. 754-762, Freiburg, Germany, 22-25 June, (2004).
16. S. Kalogirou, Y. Tripanagnostopoulos, M. Souliotis. "Performance of a solar space heating system employing collectors with colored absorber". Proc. (in CD) Int. Conf. WREC VIII, Denver, USA, 29 August - 3 September, (2004).
17. Y. Tripanagnostopoulos, M. Souliotis, J. K. Tonui, A. Kavga. "Illumination aspects for efficient greenhouses". Proc. (in CD) Int. Conf. Greensys2004, Leuven, Belgium, 12-16 September, (2004).
18. Y. Tripanagnostopoulos, M. Souliotis, J. K. Tonui, A. Kavga. "Greenhouse energy supply by solar/wind systems". Proc. (in CD) Int. Conf. Greensys2004, Leuven, Belgium, 12-16 September, (2004).
19. Y. Tripanagnostopoulos, S. Kalogirou, M. Souliotis, P. Charalambous. "Design and performance of Hybrid PV/T solar water heaters". Proc. (in CD, 11a, Photovoltaics, 3115) 3rd International Heat Powered Cycles Conference, Larnaca, Cyprus, 10-13 October, (2004).

20. Y. Tripanagnostopoulos, A. Christodoulou, S. Tselepis, M. Souliotis, J. K. Tonui "Practical aspects for small wind turbine applications". Proc. Int. EWEC 2004 Conf., Track 7; Autonomous and/or Hybrid Systems, London, UK, 22-25 November, (2004).
21. Y. Tripanagnostopoulos, M. Souliotis. "Booster Reflector Contribution to Performance Improvement of Solar Collectors". Proc. (in CD) Int. Conf. WREC 2005, pp. 63-68, Aberdeen, Scotland, UK, 22-27 May, (2005).
22. M. Souliotis, Y. Tripanagnostopoulos. "Design and Operation Aspects of ICS Solar Water Heaters". Proc. (in CD) Int. Conf. WREC 2005, pp. 69-74, Aberdeen, Scotland, UK, 22-27 May, (2005).
23. Y. Tripanagnostopoulos, M. Souliotis, S. Tselepis, V. Dimitriou, Th. Makris. "Design and performance aspects for low concentration photovoltaics". Proc. (in CD) 20th European PV Solar Energy Conf., pp. 2311–2314, Barcelona, Spain, 6-10 June, (2005).
24. Y. Tripanagnostopoulos, A. Kavga, M. Souliotis. "Irradiation Control in Greenhouses". Proc. Int. Conf. FMNS 2005, Vol. 2, pp. 416–423, Blagoevgrad, Bulgaria, 8-11 June, (2005).
25. M. Souliotis, Y. Tripanagnostopoulos. "ICS Solar Water Heaters". Proc. Int. Conf. FMNS 2005, Vol. 2, pp. 423–432, Blagoevgrad, Bulgaria, 8-11 June, (2005).
26. Y. Tripanagnostopoulos, A. Christodoulou, M. Souliotis. "Solar and Wind Energy Systems Integration on Buildings". Proc. Int. Conf. Sustainable Construction: Action for Sustainability in the Mediterranean, SD MED 2005, Athens, Greece, 8-11 June, (2005).
27. E. Michalena, M. Souliotis, Y. Tripanagnostopoulos. "Application perspectives of solar energy systems in the Hellenic tourist sector". Proc. Int. Conf. RES and Islands, Constantinoupolis, Turkey, 8-11 June, (2005).
28. S. Kalogirou, G. Florides, Y. Tripanagnostopoulos, M. Souliotis. "Performance of a solar system used for heating, cooling and hot water production employing colored collectors". Proc. Int. Conf. CLIMA, Lausanne, Switzerland, 9-12 October, (2005).
29. M. Souliotis, Y. Tripanagnostopoulos, A. Kavga. "The use of Fresnel Lenses to reduce the ventilation needs of greenhouses". Proc. (in CD) Int. "Symposium on Greenhouse Cooling", Almeria, Spain, 24-27 April, (2006).
30. Y. Tripanagnostopoulos, M. Souliotis, S. Tselepis, A. Christodoulou. "Small wind turbines application in the built and agricultural sector". Proc. Int. Conf. EWEC 2006, Athens, Greece, 27 February - 2 March, (2006).
31. M. Souliotis, Y. Tripanagnostopoulos. "Optical study of double tank ICS solar systems". Proc. (in CD) Int. Conf. EuroSun2006, Glasgow, UK, 27-30 June, (2006).
32. S. Kalogirou, M. Souliotis, Y. Tripanagnostopoulos. "ICS solar water heater study using artificial neural networks". Proc. (in CD) Int. Conf. EuroSun2006, Glasgow, UK, 27-30 June, (2006).
33. Y. Tripanagnostopoulos, M. Souliotis, R. Battisti. "Performance and LCA study of ICS solar water heaters". Proc. (in CD) Int. Conf. WREC IX, Florence, Italy, 19-25 August, (2006).
34. Y. Tripanagnostopoulos, E. Paradissis, M. Souliotis. "Solar driven Stirling engines for rural and remote applications". Proc. (in CD) Int. Conf. WREC IX, Florence, Italy, 19-25 August, (2006).
35. M. Souliotis. "The effect of the non-uniform distribution of solar radiation on cylindrical absorbers of CPC type ICS solar water heaters". Proc. (in CD) Int. Conf. WREC IX, Florence, Italy, 19-25 August, (2006).
36. M. Souliotis, S. Pnevmatikakis, P. Kefalas, G. Tripanagnostopoulos, Y. Kandias, R. Battisti, Y. Kaouris, Y. Tripanagnostopoulos. "Comparison of ICS with thermosyphon type solar water heaters". Proc. Int. Conference ESTEC2007, pp. 169-175, Freiburg, Germany, 19-20 June, (2007).
37. Y. Tripanagnostopoulos, M. Souliotis, Th. Makris, P. Georgostathis. "Design and performance of hybrid PV/T solar water heaters". Proc. Int. Conference ESTEC2007, pp. 388-392, Freiburg, Germany, 19-20 June, (2007).
38. Y. Tripanagnostopoulos, M. Souliotis, Th. Makris. "Combined solar and wind energy systems for building application". International Workshop EPEQUB, Milos, Greece, 12-13 July, (2007).
39. Y. Tripanagnostopoulos, M. Souliotis. "Improved ICS solar systems for low cost domestic water heating". International Workshop EPEQUB, Milos, Greece, 12-13 July, (2007).
40. Y. Tripanagnostopoulos, M. Souliotis. "Photovoltaics, small wind turbines and thermal collectors, an effective approach for building integrated solar and wind energy technologies". Int Conf Hybrid-PV and Mini Grid, Athens, Greece, 29–30 May, (2008).
41. S. A. Kalogirou, G. Florides, D. Tsipas, M. Ekhrwat, Y. Tripanagnostopoulos, M. Souliotis. "A TRNSYS Model of a Hybrid PV/T Solar Collector System". Proc. (in CD) Int. Conf. WREC X, Glasgow, Scotland, 19-25 July, (2008).
42. M. Souliotis, Y. Tripanagnostopoulos, S. A. Kalogirou, G. Florides, D. Tsipas, M. Ekhrwat. "Experimental Study of a Thermosiphonic Hybrid PV/T Solar System". Proc. (in CD) Int. Conf. SolPol 2008, Warsaw, Poland, 22–26 September, (2008).

- 43.D. Chemisana, M. Souliotis, J. Roseli. "A new PV/Thermal Concentrating System for Architectural Integration". Proc. (in CD) Int. Conf. SolarPACES 2009, Berlin, Germany, 15–18 September, (2009).
- 44.D. Cheminsana, M. Ibáñez, J. I. Rosell, Y. Tripanagnostopoulos, M. Souliotis. "Influential Parameters on a Building Integrated Hybrid PVT Concentrator". 5th European Conference PV-Hybrid and Mini-Grid, Tarragona, Spain, 29-30 April, (2010).
- 45.Y. Tripanagnostopoulos, M. Souliotis, Th. Makris, D. Cheminsana. "Effective Combination of Solar and Wind Energy Systems". 5th European Conference PV-Hybrid and Mini-Grid, Tarragona, Spain, 29-30 April, (2010).
- 46.Y. Tripanagnostopoulos, M. Souliotis. "The Important role of Solar Water Heaters to Adapt Energy Demand in Domestic and Industrial Sectors" International Conference PROMITHEAS 2010, Athens, Greece, 7-8 Oct. (2010).
- 47.P. Quinlan, M. Smyth, P. Griffiths, J. Mondol, A. Zacharopoulos, M. Ramirez, M. Souliotis, Y. Tripanagnostopoulos. "Integrated Collector Storage Solar Water Heater Utilising Partial Vacuum and Phase Change Materials". International Conference for Sustainable Energy Storage (IC-SES 2011), Belfast, U.K., 21-24 February, (2011).