

List of published work

1. Papers published in International Journals of the SCI

- 1.1. Katsoulas, N., Baille, A., Kittas, C., 2001. Effect of air misting on transpiration and bulk conductances of a greenhouse rose canopy. *Agricultural and Forest Meteorology*, 106(3): 233-247.
- 1.2. Baille, A., Kittas, C., Katsoulas, N., 2001. Influence of whitening on greenhouse microclimate and crop energy partitioning. *Agricultural and Forest Meteorology*, 107(4): 293-306.
- 1.3. Kittas, C., Katsoulas, N., Baille, A., 2001. Influence of greenhouse ventilation regime on microclimate and energy partitioning of a rose canopy during summer conditions. *Journal of Agricultural Engineering Research*, 79(3): 349-360.
- 1.4. Katsoulas, N., Baille, A., Kittas, C., 2002. Influence of leaf area index on canopy energy partitioning and greenhouse cooling requirements. *Biosystems Engineering*, 83(3): 349-359.
- 1.5. Kittas, C., Boulard, T., Bartzanas, T., Katsoulas, N., Mermier, M., 2002. Influence of an insect screen on greenhouse ventilation. *Transactions of the ASAE*, 45(4): 1083-1090.
- 1.6. Kittas, C., Katsoulas, N., Baille, A., 2003. Influence of an aluminised thermal screen on greenhouse microclimate and canopy energy balance. *Transactions of the ASAE*, 46(6): 1653-1663.
- 1.7. Kittas, C., Karamanis, M., Katsoulas, N., 2005. Air temperature regime in a forced ventilated greenhouse with a rose crop. *Energy and Buildings*, 37: 807-812.
- 1.8. Bartzanas, T., Katsoulas, N., Kittas, C., Boulard, T., Mermier, M., 2005. The effect of vent configuration and insect screen on greenhouse microclimate. *International Journal of Ventilation*, 4(3): 193-202.
- 1.9. Katsoulas, N., Kittas, C., Dimokas, G., Lykas, Ch., 2006. Effect of irrigation frequency on rose flower production and quality. *Biosystems Engineering*, 93(2): 237-244.
- 1.10. Katsoulas, N., Bartzanas, T., Boulard, T., Mermier, M., Kittas, C., 2006. Effect of vent openings and insect screens on greenhouse ventilation. *Biosystems Engineering*, 93(4): 427-436.
- 1.11. Lykas, C., Katsoulas, N., Giaglaras, P., Kittas, C., 2006. EC and pH prediction in a recirculated nutrient solution of a greenhouse soilless rose crop. *Journal of Plant Nutrition*, 29: 1585-1599.
- 1.12. Kittas, C., Tchamitchian, M., Katsoulas, N., Karaiskou, P., Papaioannou, Ch., 2006. Effect of two new UV-absorbing greenhouse-covering films on growth and yield of an eggplant soilless crop. *Scientia Horticulturae*, 110(1): 30-37.
- 1.13. Katsoulas, N., Baille, A., Kittas, C., 2007. Leaf boundary layer conductance in ventilated greenhouses. An experimental approach. *Agricultural and Forest Meteorology* 144: 180-192

- 1.14. Savvas, D., Stamati, E., Tsirogiannis, I. L., Mantzos, N., Barouchas, P. E., Katsoulas, N., Kittas, C., 2007. Interactions between salinity and irrigation frequency in greenhouse pepper grown in a closed-loop hydroponic system. *Agricultural Water Management*, 91: 102-111.
- 1.15. Katsoulas, N., Kittas, C., Tsirogiannis, I. L., Kitta, E., Savvas D., 2007. Greenhouse microclimate and soilless pepper crop production and quality as affected by a fog evaporative cooling system. *Transactions of the ASABE*, 50(5): 1831-1840
- 1.16. Lykas Ch., Papafotiou M., Katsoulas N., Kittas C., 2008. *Gardenia jasminoides* height control using a photosensitive polyethylene film. *HortScience*, 43(7): 2027-2033.
- 1.17. Katsoulas N., Kittas C., 2008. Impact of greenhouse microclimate on plant growth and development with special reference to the Solanaceae. In: Passam H. (Ed) *The fruiting species of the Solanaceae. The European Journal of Plant Science and Biotechnology 2 (Special Issue 1)*, 31-44.
- 1.18. Kittas C., Katsoulas N., Bartzanas T., Mermier M., Boulard T., 2009. The impact of insect screens and ventilation openings on the greenhouse microclimate. *Transactions of the ASABE*, 51(6): 2151-2165.
- 1.19. Katsoulas N., Savvas D., Tsirogiannis I., Merkouris, O., Kittas C., 2009. Response of an eggplant crop grown under Mediterranean summer conditions to greenhouse cooling. *Scientia Horticulturae*, 123(1): 90-98.
- 1.20. Tsirogiannis I., Katsoulas N., Kittas C., 2010. Effect of irrigation scheduling on gerbera flower yield and quality. *HortScience*, 45:1-6.
- 1.21. Khah, E.M., Katsoulas, N., Tchamitchian, M., Kittas, C., 2011. Effect of grafting on eggplant leaf gas exchanges under Mediterranean greenhouse conditions. *International Journal of Plant Production*, 5(2): 121-134.
- 1.22. Kittas, C., Katsoulas, N., Rigakis, N., Bartzanas, T., Kitta, E., 2012. Effects on microclimate, crop production and quality of a tomato crop grown under shade nets. *Journal of Horticultural Science and Biotechnology*, 87(1): 7-12.
- 1.23. Kitta, E., Katsoulas, N., Savvas, D., 2012. Shading effects on greenhouse microclimate and crop transpiration in a cucumber crop grown under Mediterranean conditions. *Applied Engineering in Agriculture*, 28(1): 129-140.
- 1.24. Katsoulas, N., Boulard, N., Tsiropoulos, N., Bartzanas, T., Kittas, C., 2012. Experimental and modelling analysis of pesticides fate from greenhouses: case of pyrimethanil on tomato crop. *Biosystems Engineering*, 113(2): 195-206.
- 1.25. Papaioannou, Ch., Katsoulas, N., Maletsika, P., Siomos, A., Kittas, C., 2012. Effects of a UV-absorbing greenhouse covering film on tomato yield and quality. *Spanish Journal of Agricultural Research*, 10(4): 959-966.
- 1.26. Bartzanas, T., Kacira, M., Zhu, H., Karmakar, S., Tamimi, E., Katsoulas, N., Lee, In Bok., Kittas, C., 2012. Computational fluid dynamics applications to improve crop production systems. *Computers and Electronics in Agriculture*, 93: 151-167.
- 1.27. Tsirogiannis, I. Katsoulas, N. Savvas, D. Karras G. Kittas C., 2013. Relationships between reflectance and water status in a greenhouse rocket

- (*Eruca sativa* Mill.) cultivation. *European Journal of Horticultural Science*, 78(6): 275-282.
- 1.28. Kitta, E., Katsoulas, N., Kandila, A., González-Real M.M., Baille A., 2014. Photosynthetic acclimation of sweet pepper plants to greenhouse conditions. *HortScience*, 49(2): 166-172.
 - 1.29. Kitta, E., Baille, A., Katsoulas, N., Rigakis, N., González-Real, M.M., 2014. Effects of cover optical properties on greenhouse radiative environment and sweet pepper productivity. *Biosystems Engineering*, 122:115-126.
 - 1.30. Kitta, E., Baille, A., Katsoulas, N., Rigakis, N., 2014. Predicting reference evapotranspiration for greenhouse-grown crops. *Agricultural Water Management*, 143: 122-130.
 - 1.31. Dimokas, G., Katsoulas, N., Kittas, C., Tchamitchian, M., 2014. Case studies using the biological simulator TOMGRO for greenhouse tomato crop cultivations. *Geotechnical Scientific Subjects*, 23(2): 4-11 (in Greek).
 - 1.32. Rigakis, N., Katsoulas, N., Teitel, M., Bartzanas, T., Kittas, C., 2015. A simple model for ventilation rate determination in greenhouses. *Energy and Buildings*, 87: 293-301.
 - 1.33. Katsoulas, N., Savvas, D., Kitta, E., Bartzanas T., Kittas C., 2015. Extension and evaluation of a model for automatic drainage solution management in tomato crops grown in semi-closed hydroponic systems. *Computers and Electronics in Agriculture*, 113: 61–71. <https://doi.org/10.1016/j.compag.2015.01.014>
 - 1.34. Katsoulas, N., Sapounas, A., De Zwart, F., Dieleman, J.A., Stanghellini, C., 2015. Reducing ventilation requirements in semi-closed greenhouses increases water use efficiency. *Agricultural Water Management*, 156: 90-99.
 - 1.35. Katsoulas, N., Peponakis, K., Ferentinos, K.P., Kittas, C., 2015. Calibration of a growth model for tomato seedlings (TOMSEED) based on heuristic optimisation. *Biosystems Engineering*, 40: 34-47.
 - 1.36. Antoniadis, D., Katsoulas, N., Papanastasiou, D., Christidou, V., Kittas, C., 2016. Evaluation of thermal comfort in schoolyards under Mediterranean climate conditions. *International Journal of Biometeorology*, 60(3): 319-34.
 - 1.37. Apostolou K., Pappas –Zois E., Flessas A., Neofitou C., Katsoulas N., Kittas C., Hatzioannou M., 2016. Snail farming in net-covered greenhouses: a comparison between semi-natural and artificial conditions. *Agriculture & Food*, 4: 646-654.
 - 1.38. Katsoulas, N., Elvanidi, A., Ferentinos, K.P., Kacira, M., Bartzanas, T., Kittas, C., 2016. Crop reflectance monitoring as a tool for water stress detection in greenhouses: a review. *Biosystems Engineering*, 151: 374-398.
 - 1.39. Tzounis, A., Katsoulas, N., Ferentinos, K.P., Bartzanas, T., Kittas, C., 2016. Development of a WSN for greenhouse microclimate distribution monitoring. *The Annals of “Valahia” University of Targoviste*, 10(1), 7-14. DOI: 10.1515/agr-2016-0002
 - 1.40. Katsoulas, N., Antoniadis, D., Tsirogiannis, I.L., Labraki, E., Bartzanas, T., Kittas, C., 2016. Microclimatic effects of planted hydroponic structures in urban

- environment: measurements and simulations. *International Journal of Biometeorology*, 61(5), 943-956, DOI 10.1007/s00484-016-1274-0.
- 1.41. Ferentinos, K.P., Katsoulas, N., Tzounis, A., Bartzanas, T., Kittas, C., 2017. Wireless sensor networks for greenhouse climate and plant condition assessment. *Biosystems Engineering*, 153, 70-81. <https://doi.org/10.1016/j.biosystemseng.2016.11.005>
 - 1.42. Elvanidi, A., Katsoulas, N., Bartzanas, T., Ferentinos, K.P., Kittas, C., 2017. Crop water status assessment in controlled environment using crop reflectance and temperature measurements. *Precision Agriculture*, 18(3), 332-349, DOI 10.1007/s11119-016-9492-3.
 - 1.43. Tzounis, A., Katsoulas, N., Bartzanas, T., Kittas, C., 2017. Internet of Things in agriculture, recent advances and future challenges. *Biosystems Engineering*, 164, 31-48. <https://doi.org/10.1016/j.biosystemseng.2017.09.007>
 - 1.44. Nikolaou, G., Neocleous, D., Katsoulas, N., Kittas, C., 2018. Effect of irrigation frequency on growth and production of a cucumber crop under soilless culture. *Emirates Journal of Food and Agriculture*, 29(11): 863-871.
 - 1.45. Elvanidi, A., Katsoulas, N., Ferentinos, K.P., Bartzanas, T., Kittas, C., 2018. Hyperspectral machine vision as a tool for water stress severity assessment in soilless tomato crop. *Biosystems Engineering*, 165: 25-35. <https://doi.org/10.1016/j.biosystemseng.2017.11.002>
 - 1.46. Nikolaou, G., Neocleous, D., Katsoulas, N., Kittas, C., 2018. Modelling transpiration of soilless greenhouse cucumber and its relationship with leaf temperature in a Mediterranean climate. *Emirates Journal of Food and Agriculture*, 29(12): 911-920.
 - 1.47. Al-Mulla, Y. A., Al-Busaidi, H., Al-Balushi, M., Al-Mahdouri, A., Kittas, C., Katsoulas, N., 2018. Analysis of microclimate and cucumber fruit yield in a screenhouse and an evaporatively cooled greenhouse. *Transactions of the ASABE*, 61(2): 619-629. doi: 10.13031/trans.12144.
 - 1.48. Nikolaou, G., Neocleous, D., Katsoulas, N., Kittas, C., 2018. Dynamic assessment of whitewash shading and evaporative cooling on the greenhouse microclimate and cucumber growth in a mediterranean climate. *Italian Journal of Agrometeorology*, 2-18: 15-26.
 - 1.49. Ropokis, A., Ntatsi, G., Kittas, C., Katsoulas, N., Savvas, D., 2018. Impact of cultivar and grafting on nutrient and water uptake by sweet pepper (*Capsicum annuum* L.) grown hydroponically under Mediterranean climatic conditions. *Frontiers in Plant Science*, 9, 1244, doi.org/10.3389/fpls.2018.01244
 - 1.50. Antoniadis, D., Katsoulas, N., Kittas, C., 2018. Simulation of schoolyard's microclimate and human thermal comfort under Mediterranean climate conditions: Effects of trees and green structures. *International Journal of Biometeorology*, 62:2025–2036, <https://doi.org/10.1007/s00484-018-1612-5>.
 - 1.51. Elvanidi, A., Katsoulas, N., Loulou, I., Avgoustaki, D., Kittas, C., 2018. Crop reflectance measurements for nitrogen deficiency detection in a soilless tomato crop. *Biosystems Engineering*, 176: 1-11. <https://doi.org/10.1016/j.biosystemseng.2018.09.019>

- 1.52. Elvanidi, A., Katsoulas, N., Kittas, C., 2018. Automation for water and nitrogen deficit stress detection in greenhouse based on spectral indices. *Horticulturae*, 4(4):47, doi.org/10.3390/horticulturae4040047
- 1.53. Petropoulos, S., Fernandes, Â., Katsoulas, N., Barros, L., Ferreira, I., 2018. The effect of covering material on the yield, quality and chemical composition of greenhouse grown tomato fruit. *Journal of the Science of Food and Agriculture*, 99: 3057-3068. doi:10.1002/jsfa.9519
- 1.54. Metsoviti, M., Katsoulas, N., Karapanagiotidis, I., Papapolymerou, G., 2018. Effect of nitrogen concentration, two-stage and prolonged cultivation on growth rate, lipid and protein content of *Chlorella vulgaris*. *Journal of Chemical Technology & Biotechnology*, 94: 1466–1473, <https://doi.org/10.1002/jctb.5899>
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- 1.56. Ropokis, A., Ntatsi, G., Kittas, C., Katsoulas, N., Savvas, D., 2019. Effects of temperature and grafting on yield, nutrient uptake, and water use efficiency of a hydroponic greenhouse sweet pepper crop. *Agronomy* 2019, 9(2), 110; <https://doi.org/10.3390/agronomy9020110> .
- 1.57. Nikolaou, G., Neocleous, D., Katsoulas, N., Kittas, C., 2019. Effects of cooling systems on greenhouse microclimate and cucumber growth under mediterranean climatic conditions. *Agronomy*, 9(6), 300; <https://doi.org/10.3390/agronomy9060300> .
- 1.58. Katsoulas, N., Stanghellini, C., 2019. Modelling crop transpiration in greenhouses: Different models for different applications. *Agronomy*, 9, 392; <https://doi.org/10.3390/agronomy9070392> .
- 1.59. Metsoviti, M., Katsoulas, N., Karapanagiotidis, I., Papapolymerou, G., 2019. Comparison of growth rate and nutrient content of five microalgae species cultivated in greenhouses, *Plants*, 8(8), 279; <https://doi.org/10.3390/plants8080279>
- 1.60. Metsoviti, M., Katsoulas, N., Karapanagiotidis, I., Papapolymerou, G., 2019. Effect of light quality and quantity on growth rate and nutrient content of *chlorella vulgaris*, *Plants*, 9(1), 31; <https://doi.org/10.3390/plants9010031>
- 1.61. Metsoviti, M., Katsoulas, N., Karapanagiotidis, I., Papapolymerou, G., 2019. Current and Potential Applications of Microalgae: A Mini Review. *Oceanography & Fisheries Open Access Journal*, 11(3): 1-5. <https://doi.org/10.19080/OFOAJ.2019.11.555811>
- 1.62. Baxevanou, C., Fidaros, D., Katsoulas, N., Mekeridis, E., Varlamis, C., Zachariadis, A., Logothetidis, S., 2020. Simulation of radiation and crop activity in a greenhouse covered with semitransparent organic photovoltaics. *Applied Sciences*, 10, 2550; <https://doi.org/10.3390/app10072550>
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- 1.73. Sapounas, A., Katsoulas, N., Slager, B., Bezemer, R., Lelieveld, C., 2020. Semi-closed greenhouses: a review on design, control and performance. *Agronomy*, 10(11), 1739; <https://doi.org/10.3390/agronomy10111739>
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- instantaneous leaf temperature measurements. *Agronomy*, 10(12), 1985.
<https://doi.org/10.3390/agronomy10121985>
- 1.76. Ropokis, A., Ntatsi, G., Roupheal, Y., Kotsiras, A., Kittas, C., Katsoulas, N., Savvas, D., 2021. Responses of sweet pepper (*Capsicum annum* L.) cultivated in a closed hydroponic system to variable Ca concentrations in the nutrient solution. *Journal of the Science of Food and Agriculture*, 101: 4342-4349.
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 - 1.91. Karapanagiotidis, I.T., Metsoviti, M.N., Gkalogianni, E.Z., Psoufakis, P., Asimaki, A., Katsoulas, N., Papapolymerou, G., Zarkadas, I., 2022. The effects of replacing fishmeal by *Chlorella vulgaris* and fish oil by *Schizochytrium* sp. and *Microchloropsis gaditana* blend on growth performance, feed efficiency, muscle fatty acid composition and liver histology of gilthead seabream (*Sparus aurata*). *Aquaculture*, 561, 738709, <https://doi.org/10.1016/j.aquaculture.2022.738709>.
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