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Prof. Xanthippi Zianni's brief CV and involvement in the thermoelectric community



Xanthippi Zianni (XZ) obtained her Degree in Physics from the University of Athens (Greece) in 1990 and her PhD in Theoretical Solid State Physics from the University of Warwick (UK) in 1993. She is currently a Professor of Physics at the National and Kapodistrian University of Athens (NKUA).

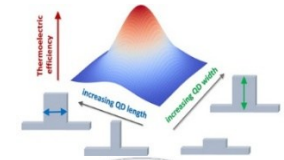
XZ's research interests lie in theoretical condensed matter physics and computational modelling. She has worked on electron and phonon properties in low-dimensional, amorphous, composite, nanomaterials and devices, focusing on electric, magnetic, optical, thermal, and thermoelectric properties at the nano- and macro- scales.

XZ has conducted research at Greek academic institutions, including the University of Athens and the Technological Educational Institute (TEI) of Chalkida/Sterea Ellada, as well as at the Greek Research Centre NCSR 'Demokritos'. She has also collaborated with international academic and research institutions, such as the Department of Materials Science at the University of Milano Bicocca (Italy), the Department of Physics at the University of Lund (Sweden), MATEIS and CETHIL at INSA de Lyon (France) as an Invited Professor, and LEMTA at the University of Lorraine (France) as an Invited Researcher. XZ is a member of the International and European Thermoelectric Societies, as well as the European Network on Thermal Nanosciences and Nanoengineering. In 2017, she was elected as an Academician of the International Thermoelectric Academy (ITA). She has actively contributed to the organizing and scientific committees of both Greek national and international conferences.

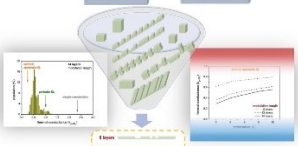
XZ has been actively engaged in the thermoelectric community for over 20 years. Her first interaction with the community dates back to 2007, when she presented her theoretical predictions on Coulomb oscillations of the thermal conductance of a quantum dot at the 5th European Conference on Thermoelectrics (ECT). These predictions were later confirmed experimentally. Since then, she has consistently participated in the annual conferences of the thermoelectric community. She has developed theoretical models to understand and interpret observations related to the thermoelectric properties of non-uniform materials, including highly doped nanocrystalline materials, nanocomposites, and defected bulk materials. Since 2010, she has been researching width-modulated materials, introducing geometry modulation as a strategy to enhance thermoelectric efficiency. Through her work, she has contributed to a deeper understanding of transport phenomena in these structures and has uncovered new behaviors and properties that had not been previously explored. These findings have provided insights that could influence future advancements in thermoelectric metamaterials.

XZ has consistently shared her findings at thermoelectric research conferences, as either a contributing or an invited speaker, as well as in lectures on thermoelectric effects and transport properties in energy converters at international summer schools. She is highly motivated to support ITS actions and initiatives that foster international collaboration among researchers.

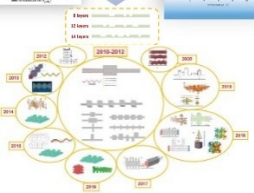
Representative Publications:



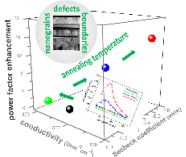
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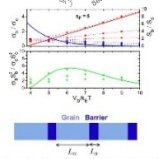
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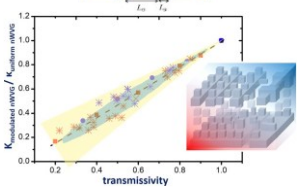
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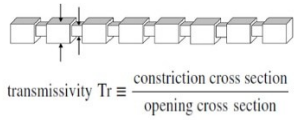
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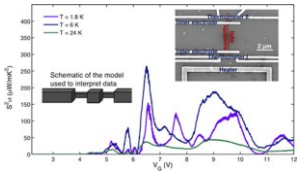
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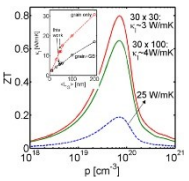
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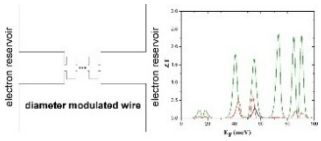
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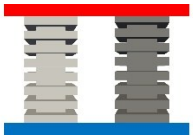
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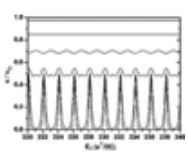
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