

N i k o l a o s S k a n d a l o s

Postdoctoral Researcher / University of Patras

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He is a Physicist, holding an MSc in Renewable Energy Engineering from Heriot-Watt University and a PhD from the University of Patras. He has been elected Assistant Professor at the University of Patras in the field of Renewable Energy Sources, with appointment pending. His research focuses on Renewable Energy Sources, building physics, energy efficiency, solar technologies, and their integration on the building envelope. He worked as Senior Researcher at the University Centre for Energy Efficient Buildings of the Czech Technical University in Prague, participating in research projects related to energy-efficient buildings, BIPV, passive/active solar systems and energy communities. At the University of Patras, he has taught the course “Sustainable Building Design”, while at the Hellenic Open University, he teaches the module EPK52 “Building Envelope”, linking the building envelope with energy performance, thermal comfort, and sustainable indoor environmental design.

Selected Publications

1. Skandalos, N. & Karamanis, D. (2025). Decarbonizing operational emissions in urban neighborhoods with the integration of rooftop photovoltaics and green infrastructure under current and future climate conditions. *Energy and Buildings*, 329, 115306.
2. Kapsalis, V., Maduta, C., Skandalos, N. et al. (2024). Critical assessment of large-scale rooftop photovoltaics deployment in the global urban environment. *Renewable and Sustainable Energy Reviews*, 189, 114005.
3. Skandalos, N., Wang, M., Kapsalis, V. et al. (2022). Building PV integration according to regional climate conditions: BIPV regional adaptability extending Köppen-Geiger climate classification. *Renewable and Sustainable Energy Reviews*, 169, 112950.
4. Skandalos, N., Karamanis, D. (2021). An optimization approach to photovoltaic building integration towards low energy buildings in different climate zones. *Applied Energy*, 295, 117017.
5. Skandalos, N., Karamanis, D., Peng, J., Yang, H. (2018). Overall energy assessment and integration optimization process of semi-transparent PV glazing technologies. *Progress in Photovoltaics: Research and Applications*, 26(7), 473–490.