

Prof. Radu A Sporea

Advanced Technology Institute
University of Surrey
United Kingdom



Dr Radu Sporea is Associate Professor in Power Electronics and Semiconductor Devices at the Advanced Technology Institute (ATI), University of Surrey and holds an EPSRC Early Career Fellowship (2021-2026).

Prior to this appointment, he was Royal Academy of Engineering Academic Research Fellow (2011-2016), EPSRC PhD+ Fellow (2010-2011) and PhD researcher (2006 – 2010) in the same centre. Before joining Surrey, Radu has studied Computer Systems Engineering at “Politehnica” University, Bucharest, Romania, and has worked as a Design Engineer for Catalyst Semiconductor Romania, now part of ON Semiconductor, on ultra-low-power CMOS analog circuits.

Current research in Radu’s team focuses on three main topics, through a wide range of international collaborations:

1. Advanced semiconductor device design, including transistors with increased tolerance to fabrication variability, improved energy efficiency and high gain, namely multimodal and source-gated transistors. These devices have important applications in emerging neuromorphic, signal conditioning, and display circuits.
2. Large area sensors and sensor arrays for smart environments, focusing on multi-modal low-cost integration in commercial manufacturing platforms and mass-market products.
3. Paper-based and large scale electronics for smart spaces and physical-digital interaction.

Radu is Distinguished Lecturer for the IEEE Electron Devices Society and Chairs the IEEE EDS UK&Ireland Chapter.