**Session Title**: Hybrid Energy Harvesting and Intelligent Sensing

**Introduction**:

The "Hybrid Energy Harvesting and Intelligent Sensing" session aims to explore the emerging synergies between hybrid energy harvesting systems and intelligent sensing technologies. As the world shifts toward sustainable and autonomous systems, combining multiple energy harvesting techniques with advanced sensing capabilities is critical for enhancing the efficiency, adaptability, and scalability of smart devices. This session will highlight cutting-edge research and practical applications of hybrid energy harvesting integrating, for example, vibration, wind, magnetism, and solar energies, with intelligent sensing systems that monitor, adapt, and optimize energy usage in real-time. Besides, the hybrid mechanism can also focus on integrating the energy harvesting technologies such as piezoelectric, electromagnetic, triboelectric mechanisms, etc. By hosting this session, we aim to foster collaboration among researchers, engineers, and industry experts to advance the next generation of self-powered and intelligent systems, contributing to a more sustainable and energy-efficient future.

**Topics**:

* Energy harvesters with integrated energy sources
* Energy harvesters with integrated energy transduction mechanisms
* Energy harvester with self-sensing function for self-powered fault or damage detection
* AI-based reverse design of energy harvesters or sensors
* Intelligent circuits for managing hybrid energy harvesters and/or sensors
* Energy harvesters for multiple functions
* Self-powered sensing based on energy harvesters

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