



## Active Intelligent Sensors for Better Data Acquisition

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Deadline for manuscript  
submissions:

**31 October 2024**

### Message from the Guest Editor

Dear Colleagues,

Active sensors are systems that play a proactive role in the data acquisition process. They do not only sense the phenomenon of interest but also put in place strategies to actively probe the sensed environment to obtain new types of data or improve the quality of data.

Modern active sensors include LIDAR and its evolutions. In telecommunications context, by integrating sensing into communication tasks, networks act as "radar" sensors, using its own radio signals to sense the physical world in which it operates. This approach allows the network to collect data on the range, velocity, position, orientation, size, shape, image, and materials of objects and devices. Finally, quantum sensors exploit mechanisms like quantum interference to surpass current limits.

This Special Issue focuses on sensory systems and methodologies meeting these conditions:

- Actively probing the sensing target.
- Using AI to capture new data effectively.

Please note that manuscripts that explicitly refer to defense and military operations are outside the scope of this Special Issue according to the Sustainable Development Goal 16 of the United Nations.

Dr. Davide Quaglia  
*Guest Editor*





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