

# IEEE Transactions on Consumer Electronics

## Call for Papers

### Special Section on “Consumer-Centric Sustainable and Resilient Technologies for Industry 5.0”

#### Theme:

The speed at which electronic products are utilized optimally is less as compared to what is produced. The problem with the product lifecycle is the dead-end with more e-waste leading to a global environmental crisis. Thus, it is critical to adopt and practice sustainable ways to limit this crisis. Digital technologies allow innovations by adopting smart approaches to the factories and adding value to humans involved. This motivates us to propose technologies keeping humans in the loop. Technologies like the Internet of Things (IoT), robotics, smart storage solutions, digital twins, zero trust security, and sensor fusions need to be adopted to address challenges like machine predictiveness, predictive maintenance, predictive restocking, zero wastage, etc. Consumer-centric sustainable and resilient practices in industry 5.0. will provide a wider reach for the standardization of electronic products.

The aim of this special issue is to promote research on the adoption of consumer electronics, computational intelligence, industry standards, product safety, global adoption, government policies and solutions considering human in loop. The special issue aims to feature innovative and groundbreaking research articles, and timely reviews and surveys.

#### Topics of interest in this Special Section include (but are not limited to):

- Future communication architecture for sustainable and resilient adoption in Industry 5.0
- Assistive drone application of consumer electronics
- Renewable energy production, storage and management systems for consumer electronics
- Innovative solutions for predictive maintenance, zero wastage, and predictive restocking
- Self-Sustainable medical and wearable devices for healthcare monitoring
- Blockchain based trusted framework for human-machine interaction in sustainable industry 5.0
- Internet of Things, Internet of Everywhere and Edge Computing (IoT) for resilient industry 5.0
- 6G/ 5G connectivity and signal processing issues
- Machine learning, deep learning, and federated learning approaches
- Quantum computing based approaches
- AI enabled Zero Trust Security
- Collaborative robot, sensor fusion and digital twins' solutions in consumer electronics
- Edge and Fog based approaches in Industry 5.0.

#### Important dates:

- End of submission of Manuscripts: **June 1, 2023**
- Expected publication date (tentative): May 2024

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Manuscripts should be prepared following guidelines at: <https://ctsoc.ieee.org/publications/ieee-transactions-on-consumer-electronics.html> and must be submitted online following the IEEE Transactions on Consumer Electronics instructions: <https://ctsoc.ieee.org/publications/ieee-transactions-on-consumer-electronics.html>. During submission, the Special Section on “**Consumer-Centric Sustainable and Resilient Technologies for Industry 5.0**” should be selected.