

IEEE Transactions on Consumer Electronics

Call for Papers

Special Section on “Emerging Technologies and Applications of Consumer Electronics for Healthy and Sustainable Life”

Theme:

Ensuring healthy and sustainable life and promoting well-being for all at all ages is essential to sustainable development and it is among the 17 goals of the United Nations. It is also worth pointing out that health-related activities account for a large portion of carbon emissions and energy use (especially during the pandemic), raising concerns about sustainability. For the healthy and sustainable life of human beings, it is highly expected that consumer electronics (CE) will play significant roles, not only in smart healthcare but also in many other applications with direct impacts on both health and sustainability (such as indoor air conditioning). However, the design, production, and/or operation of health-related consumer electronics require a huge amount of energy, computational power, and other resources. The data generated from health-related consumer electronics might also violate the goals of sustainable development if used inappropriately. This motivates the proposal of this special section on emerging technologies and applications of consumer electronics for healthy and sustainable life.

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

- New generation wireless communications in CE for healthy and sustainable life
- Cloud/edge/fog computing in CE for healthy and sustainable life
- Sensing and sensor systems in CE for healthy and sustainable life
- Data processing/use/management in CE for healthy and sustainable life
- Artificial intelligence in CE for healthy and sustainable life
- Security and privacy in CE for healthy and sustainable life
- Service, healthcare, eldercare, and other consumer-oriented robotics for healthy and sustainable life
- Energy efficiency and circularity of CE devices
- Healthcare applications and services powered by CE
- Electricity and energy efficiency applications and services powered by CE
- Circularity applications and services powered by CE

Important dates:

- End of submission of Manuscripts: **June 30, 2023**
- Expected publication date (tentative): April 2024

Guest Editors:

- ♦ Prof. Yuemin Ding, University of Navarra, Spain, email: yueminding@tecnun.es
- ♦ Dr. Zhibo Pang, ABB & KTH Royal Institute of Technology, Sweden, email: pang.zhibo@se.abb.com
- ♦ Dr. Po Yang, University of Sheffield, UK, email: po.yang@sheffield.ac.uk
- ♦ Dr. Kan Yu, La Trobe University, Australia, email: K.Yu@latrobe.edu.au
- ♦ Prof. Fei Pan, Sichuan Agricultural University, China, email: fei.pan@sicau.edu.cn

- ♦ Dr. Onaizah Onaizah, McMaster University, Canada, email: onaizaho@mcmaster.ca

Instructions for authors:

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 “**Emerging Technologies and Applications of Consumer Electronics for Healthy and Sustainable Life**” should be selected.