

Call for Papers

Special Issue on the Social Impact of the Internet of Medical Things: From Body Wearables to Brain Implants

In a unique interdisciplinary collaboration with the IEEE's Society on Social Implications of Technology (SSIT) and IEEE Brain, *J-FLEX* is joining forces to explore both the technology of the Internet-of-Medical-Things (IoMT) solutions and medical wearables/implantables. Articles on neurotechnologies and their societal implications will be published in *J-FLEX*, while articles on the broader social implications of neurotechnology, including opinion, commentary, and peer-reviewed articles, will appear in *IEEE Technology and Society Magazine* (TSM).

The scope of this Special *J-FLEX* Issue will focus upon system-level applications of IoT and medical wearables but will also welcome technical work that is a key facilitator of these system-level use cases. Related to the synergy with SSIT, the *J-FLEX* articles should also address aspects of its carbon neutrality, biodegradability, toxicity, abundance of raw materials, data structures, privacy and surveillance, as well as risks, benefits, efficacy, costs and ease of use. Lastly, an emphasis on application areas where flexible electronics can transcend traditional rigid and bulky CMOS-centric systems.

Topics

- Transistors and related devices
- Stretchable/Shrinkable Sensors and Electronics
- Wearable/Implantable neurotechnology
- Hybrid Systems-in-Foil
- Biomedical sensing devices
- Electronic textile/paper/skin
- Flexible/Printable Electronics in context with Circular Economy
- Socio-Technical Design
- Innovation Cycles vs Regulation
- Ergonomics of human-systems interaction
- Human Systems Engineering
- Human Systems Integration
- Human Factors
- Case studies in Flexibles, Wearables and Implantables
- Organic/Inorganic/Hybrid Flexible Sensors and Electronics
- Flexible electronics in the web of things
- Printable batteries, energy harvesters
- Wearable sensors
- Sensors for health monitoring
- Printable displays, lighting sources
- Packaging
- Clinical trials
- Smart tags, RFID tags, etc.
- Modeling of printable sensors
- Manufacturing Techniques (including Printing)
- Emerging Materials for Flexible and Printable Systems
- 3D printing
- Privacy, data structures
- Legal, insurance, governance
- Usability and effectiveness
- Cost, risks and benefits
- User Acceptance
- Social and Ethical Implications
- Sustainability, Socio-Economics
- Hope or Hype

Guest Editors

Paul R. Berger (J-FLEX EiC)

Ohio State/Tampere, Columbus, OH USA
pberger@ieee.org

John Rogers

Northwestern University, Evanston, IL USA
jrogers@northwestern.edu

Damien Coyle (IEEE Brain)

University of Bath, UK
dhc30@bath.ac.uk

Benjamin Tee

National University of Singapore, Singapore
benjamin.tee@nus.edu.sg

Katina Michael (TTS EiC)

Arizona State University, Tempe, AZ USA
katina.michael@asu.edu

Ketra Schmitt (TTM EiC)

Concordia College, Montréal, Québec, Canada
ketra.schmitt@concordia.ca

Yuxin Liu (Lead)

National University of Singapore, Singapore
lyx@nus.edu.sg

Important dates

January 2025:	Call for Papers (to appear in IEEE Journal on Flexible Electronics)
May 15, 2025:	Deadline for Paper Submission
July 15, 2025:	Completion of First Review
October 15, 2025:	Completion of Final Review
December 2025:	Publication

Submission and Peer Review of Papers

All papers shall undergo the standard IEEE J-FLEX peer-review process. Manuscripts must be submitted online, via the *IEEE Journal on Flexible Electronics Author portal*, see <https://iee.atyponrex.com/journal/jflex>. When submitting, please indicate in the “Manuscript Type” roll down menu, and also by e-mail to Mansi Kukreti, m.kukreti@ieee.org, that the paper is intended for the “**on the Social Impact of the Internet of Medical Things: From Body Wearables to Brain Implants**” Special Issue. Authors are particularly encouraged to **suggest names of potential reviewers** for their manuscripts in the space provided for these recommendations in *Manuscript Central*. For manuscript preparation and submission, please follow the guidelines in the *Information for Authors* at the IEEE J-FLEX web page, <https://iee-iflex.org/guidelines-for-authors/>.