

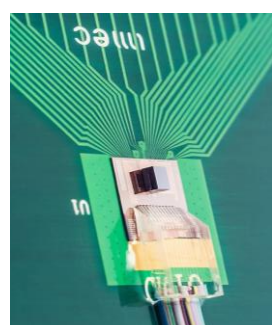
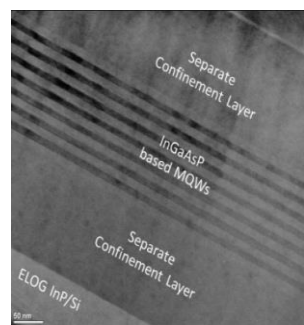
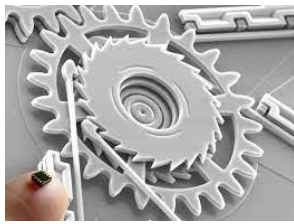
TRACK SPECIFIC CALL FOR PAPERS ST4: Optoelectronics & MEMS Device Reliability & Failure Analysis

The properties of wide bandgap semiconductors provide new capabilities and also challenges to the development of reliable and rugged power devices. Considering their relevance and active use in automotive devices, photovoltaics, power converters and many more, an understanding of their reliability issues and degradation physics is critical. In this context, we would like to invite academicians and industry practitioners in this field to submit their work to IPFA. The IPFA 2024 is actively looking for contributions in this domain.

All accepted papers will be published in the IEEE Xplore. Selected papers will be invited to submit an extended version in Microelectronics Engineering or as articles in EDFA Magazine.

Scope of submission (not limited to):

- **Reliability and failure analysis of display modules** and its components (LED, Waveguides, Drivers etc)
- **Photovoltaic devices** including silicon-based solar cells, CdTe, CIGS, Organic solar-cells, multi-junction and perovskites
- **LED devices and light/laser sources:** organic-based (OLED), inorganic (nitride, phosphide), quantum-dots, VCSELS, lasers, high intensity for automotive and lighting applications, and micro-LEDs for high pixel density applications
- **Reliability and FA of Photonics Integrated Circuits**
- **Optoelectronic sensors** (photodiode, image sensors) and **Photo-emissive detector** (e.g. photomultiplier tubes and Intensifier)
- **Thermoelectrics** – wearables, energy harvesting and product failures/ reliability
- **Micro-electro-mechanical-systems** – Tuners and sensors, semiconductor device applications



NORMAL MODE SUBMISSION

- ❖ Extended Abstract Submission: **21 Jan 24**
- ❖ Notification of Acceptance: **18 Mar 24**
- ❖ Full Manuscript Submission: **22 Apr 24**
- ❖ Final Manuscript Submission: **01 Jun 24**

EXPRESS MODE SUBMISSION



- ❖ Direct Full Paper Submission: **21 Jan 24**
- ❖ Notification of Acceptance: **18 Mar 24**
- ❖ Final Manuscript Submission: **01 Jun 24**

- **NORMAL Mode Submission** - Extended abstract (min. **2 pages**, incl. text and figures) of your original research work. Accepted abstracts will require a full manuscript (min 4 pages) to be submitted by 22nd Apr and post-mentored final manuscripts by 1st Jun.
- **EXPRESS Mode Submission** - Full Manuscript (Min. **4 pages**, incl. texts and figures) that is a complete write-up of your original research. This allows you to skip one submission setup and more time for legal approval of your post-mentored final manuscript.
- Details on abstract / manuscript submission, templates and other information are available at <https://www.ipfa-ieee.org/2024>

General Chair
Samuel Chef
NTU, Singapore
csamuel@ntu.edu.sg

Technical Program Chair
Venkat Ravikumar
AMD, Singapore
venkatkrishnan.ravikumar@amd.com

Technical Program Co-Chair
Bernice Zee
AMD, Singapore
Bernice.zee@amd.com

Conference Secretariat
Jasmine Leong / Joy Leong
J. Jayes Pte. Ltd.
ieee_ipfa@singnet.com.sg